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IN

1921

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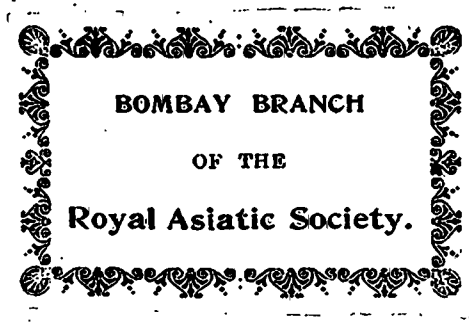

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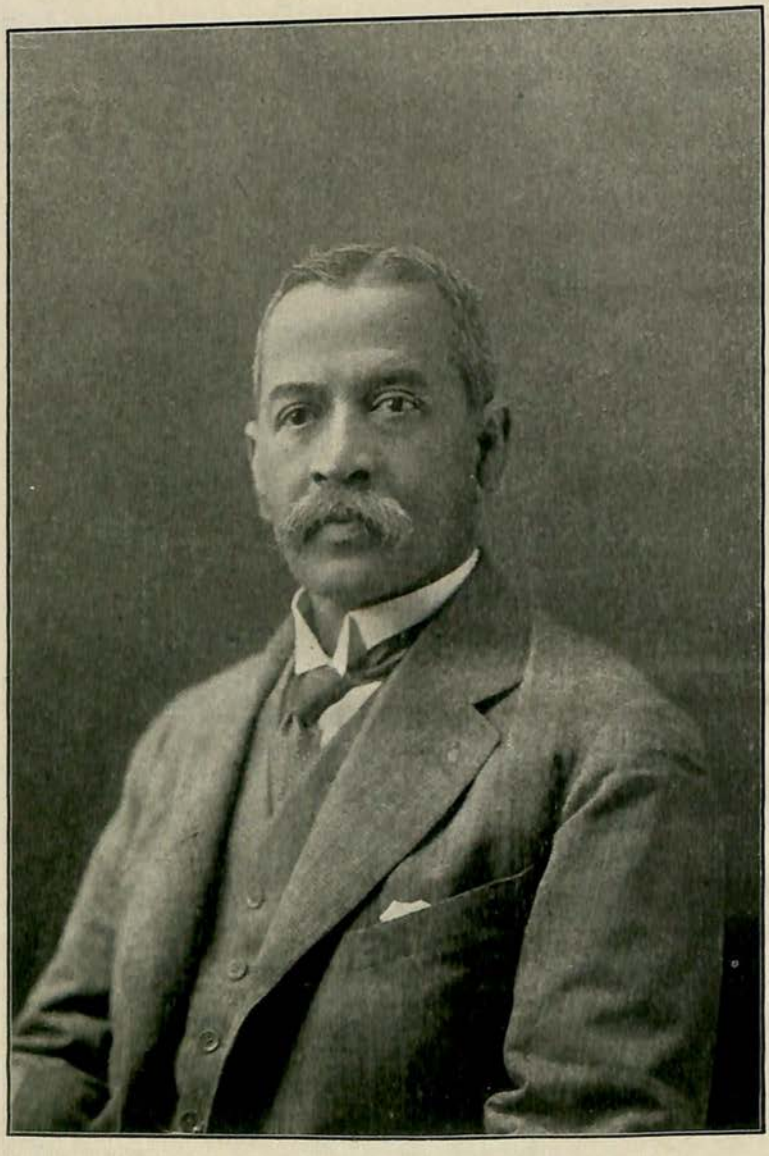

His Excellency The Right Hon'ble Satyendra Prasanna Baron Sinha
of Raipur P.C., K.C.S.I., K.C.,
The first Governor of Bihar and Orissa.

Govt of Bihar & Orissa
14/8/22

BIHAR AND ORISSA

IN

1921

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BY

G. E. OWEN, I.C.S.

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PREFACE.

It has been customary to publish each year a Report of the Administration of Bihar and Orissa covering the period of the previous financial year and such a Report has been prepared, though in a more condensed form than usual, for the prescribed period, 1st April 1920 to 31st March 1921 for submission to the Government of India. But various reasons have led the Government of Bihar and Orissa to publish an additional Report for the calendar year 1921. In the first place the beginning of the calendar year 1921 coincided with the inauguration of the Reforms Scheme in Bihar and Orissa, and it was therefore clearly desirable to publish as soon as possible after the close of the first twelve months of the new administration a report which would stimulate public interest in the administrative affairs of the province by giving the public an idea of the activities of Government during that period. Secondly the necessity in the past of making the Administration Report a complete and handy book of official reference for a particular period inevitably resulted in the inclusion of much dry material and in particular of a mass of statistics, and rendered it difficult to incorporate in the same book, without making it unwieldy, such an exposition of the policy which underlies the bare record of the yearly activities of the various departments as is essential to a popular description of the administration. In the present book, which is modelled in its general form on the last report ("India in 1920") prepared by the Director, Central Bureau of Information, Government of India, some subjects which are unlikely to be of any general interest have been omitted altogether, and on the same principle much more space has been given to subjects which have been transferred to the control of the Ministers than to the "reserved" departments. In many cases a review has been given of the activities of a particular department during a period of several years with the object both of making Government's policy more clear and of emphasizing the progress made. Statistical tables have been replaced by diagrams, and only such statistics as

are likely to be of interest to the general public have been included in the body of the report. A great part of the materials has been drawn from the official reports and publications of which a list is given in Appendix I; but the majority of these reports cover only the first three months of the period under review, and the materials for the last nine months of 1921 had not yet been collected by the various departments when the book was under preparation. These sources have therefore been supplemented by notes provided by Heads of Departments, and by other official papers which are not available to the public. The publication of the book has been delayed by a "strike" in the Government Press.

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CORRIGENDA.

PAGE.

4. Five lines from the end of the middle paragraph *for* "subject" *read* "object".

5. Nine lines from the bottom *for* "district" *read* "distinct".

13. Ten lines from the bottom *for* "Etas" *read* "East".

16. Eight lines from the bottom *for* "elaborates" *read* "electorates".

32. Six lines from the end of the first paragraph *for* "but" *read* "that".

33. (1) Three lines from the top *for* "formed" *read* "formal"
(2) and in first line of next paragraph *for* "varians" *read* "various".

40. In the footnote *for* "Chapter I page——" *read* "Chapter II, page 24" and omit the words "and Chapter IV, page——".

54. Last line but one of first paragraph *for* "on" *read* "of"

62. Six lines from the beginning of the second paragraph *for* "officer" *read* "officers".

71. Eleven lines from the bottom *for* "neary" *read* "nearly".

72. Three lines from the top *for* "open" *read* "opened".

93. Transpose the second and third lines of the middle paragraph; the sentence should *read* "The agrarian conditions of the province have inevitably formed the background of this chapter, which is mainly concerned with the various problems to which land gives rise".

100. Twelfth line of second paragraph: *after* "opposite" *insert* "page 103".

102. Third line from the end of second paragraph *for* "then" *read* "them".

PAGE

103. (1) Tenth line from the top *for* " teror " *read* " terror " and (2) fifth line from the end of same paragraph *for* " villegers " *read* " villagers ".

112. Fourth line from the top *for* " a " *read* " as ".

113. Tenth line of second paragraph *for* " fabdication " *read* " fabrication ".

115. (1) Second paragraph second line *for* "ready" *read* " already "; (2) third line *for* " markable " *read* "remarkable"; (3) fourth line omit altogether. The sentence should *read* "The fact that most of the professions open to educated young men in India are already overfilled illustrates another remarkable feature in the statistics of education in India"; (4) fifth line *for* "Through" *read* "Though".

123. Seventeenth line from the top *for* "member" *read* " number ".

131. Last five lines, two lines have been transposed : *after* the words " individual responsibilities " should be *read* " of members. The Conference was of opinion that the existing system of indirect election of District Board members by Local Boards should be replaced by direct election, and that ordinarily there should be at least one elected member for each police station area; that educated women should be eligible both as voters for and as members of local bodies;"

138. Statistical table column three heading *for* " 1910 " *read* " 1920 ".

153. Fourth line of second paragraph *for* " lead " *read* " led "

154. Thirteen lines from the bottom, two lines have been transposed : *after* the words "became common in the" *read* " larger towns and in many parts of the *mufassil*, and there was a noisy demonstration in Sasaram on the arrest of some political leaders. A particularly brutal outrage on the dead body of a spirit vendor", etc.

165. (1) In the first name under the "*C*" *List of Members of Legislative Assembly*, *for* "Babu Baidyanah Prashad Singh " *read* " Babu Baidyanath Prashad Singh ".

(2) In the last name of the same List of Members *for* " Raja Rajendra Narayan Bhanja, O.B.E., of Kanika" *read* " Raja Rajendra Narayan Bhanja Deo, O.B.E., of Kanika ".

PAGE

166. Under the "*D*" *List of Officers*, *for* "Mr. G. A. Samuel, B.A., LL.B.," *read* "Mr. J. A. Samuel, B.A., LL.B."

168. In the second line of the footnote "at at the close of the year" should *read* "at the close of the year".

172. In the ninth line from the bottom *for* "a unipue object" *read* "a unique object".

173. In the tenth line of the first paragraph *for* "to see for yourselves" *read* "to see for yourself"

175. In the third line of the second paragraph of the reply to the address *for* "civilzations" *read* "civilizations".

189. In the paragraph under *Prizes*, eighth line, *for* "togehter" *read* "together".

191. In the second line of the paragraph under *Erection and Maintenance*, *for* "Lt." *read* "Ltd."

192. In the twelfth line of the paragraph under *Arrangements*, *for* "provied" *read* "provided".

199. In the twelfth line of the paragraph under *Bengal*, *for* "charkas" *read* "charka".

200. The last line of the last paragraph has been upset.

Bihar and Orissa in 1921.

CHAPTER I.

Constitutional Changes.

The beginning of the new regime.

The opening of 1921 inaugurated two great events in the history of the province. On December 29th 1920, His Excellency The Right Hon'ble Satyendra Prasanna, Baron Sinha of Raipur, the first Indian Governor of an Indian province under the British Crown, entered upon his administration of Bihar and Orissa, raised on that date to the dignity of a Governor's province; and the same day may be said to mark the initiation of the new scheme of representative government which will go down to history as the Montagu-Chelmsford Reforms Scheme. For only a few weeks before had been completed on a broad popular franchise the first elections to the new Legislative Council. In the following pages a brief outline is given of the new constitution, followed by an account of the elections and by an analysis of the composition of the Legislative Council, directed to explain its representative character. The rest of the book deals with the activities of the Government during 1921. The legislative and miscellaneous activities of the Council are first summarised. The next three chapters describe the financial, economic and social problems with which the Government deals. These chapters cover the activities of all departments of Government except those concerned with public health, which are described in a subsequent chapter devoted to the material condition of the people. The part played by local bodies in assisting the Administration is then dealt with, and the book concludes with a description of the political atmosphere and of general events.

The conditions of the problem to solve which the new constitution has been framed have been described in the preliminary chapters

of the Report on Indian Constitutional Reforms, and need not be repeated at length. Briefly, the problem has its roots in the co-existence of the illiterate agricultural masses of India, which form the vast majority of her population, with a minority of immense political importance, highly educated, and rapidly increasing in numbers. The main difficulty in its solution is that of reconciling the growth of political self-consciousness in the educated classes and their legitimate demand for a share in the administration of their own country with the apathy and political incapacity of the masses. Looked at in another light the cause of the problem has been to ensure that the democratic and responsible form of government, which has been demanded by the advanced section of Indian politicians and which has also been the ultimate goal of British administration, should not sooner or later give place either on the one hand to anarchy and the mob rule of uneducated classes, admittedly unfit as yet for complete responsible government, or to the substitution under a democratic disguise of an Indian for a British oligarchy. This problem has been rendered still more complex by the vast size of India and by the "series of cleavages of religion, race and caste—which run through Indian society and which constantly threaten its solidarity".

The constitutional problem.

The new constitution, which has no exact parallel in the history of the constitutional development of any other people in the world, is only intelligible in the light of these conditions of the problem which it sets out to solve. It is a fluid and transitional constitution, forming a conscious link between a bureaucratic past and a democratic future. It marks "a period of political education which can only be achieved through the gradual, but expanding, exercise of responsibility". It represents a peaceful revolution as a result of which an executive responsible not directly to the people governed, but to an external sovereign power, has voluntarily transferred the major part of its responsibilities for certain important functions of Government to Ministers responsible to an electorate, while it has reserved not only complete responsibility for certain other functions but a modified responsibility even for those transferred to the Ministers. This co-ordination of two different principles of Government forms the essential feature of the new constitution, both in the Legislature and in the Executive, while the Governor represents in his own

The new constitution.

person the principle of co-ordination and the sanction which unites the two elements into the single body politic which is the Government.

In the Executive the two principles are represented in Bihar and Orissa on the one hand by the Governor in Council and on the other by the Governor acting with his Ministers. The Governor in Council consisted at first of the Governor and three Councillors, of whom two were Indian Civil Servants and one an Indian non-official. After the resignation of Lord Sinha towards the end of the year, and the assumption by the senior member of Council of the office of acting Governor, his place in the Council was not filled. The Ministers, two in number, are appointed by the Governor from the elected Members of the Legislative Council, for the lifetime of that Council. The Ministers are only subsequently re-eligible for appointment if re-elected to the Legislative Council, and they therefore hold office at the will of their constituents, and are responsible to the electorate. The Governor in Council is responsible directly to the Governor General and to the Crown. These two arms of the executive body have separate functions. The Governor in Council is responsible for what are called "Reserved" Subjects, broadly for law and order, for the administration of justice, of police and prisons, and of the sources of Imperial Revenue; the Ministers are responsible to the electorate for all those important functions of the administration which have been described in a phrase quoted in the Governor's address to Council as the "Nation-building activities of Government". These are in brief, Education, Public Health and Medical relief, Industries, Agriculture, Local Self-Government and Excise. In respect of these "transferred" subjects it is laid down in general terms in the Instructions which the Governor has received from the Crown that the Governor's responsibility is shared with his Ministers and must be kept distinct from the direct responsibility of the Governor in Council to the Crown for "reserved" subjects. He is warned that due regard must be paid to the wishes of the people as expressed by their elected representatives on matters relating to "transferred" subjects and that assent to these expressions of the people's will

The Executive. The Governor in Council and the Ministers

"Reserved" subjects.

"Transferred" subjects.

should only be refused by him in circumstances which, it is to be hoped and expected, will be comparatively rare. The transference of power from official control to responsible Ministers which has been effected by this means needs no emphasis, and it will be shown later what further opportunities are afforded to the Legislative Council to influence the Executive by means of Resolutions, by the voting of funds for the carrying on of the administration, and through the recommendations both of Standing Committees and of Committees appointed for special purposes at the Council's request.

Cohesion between the two arms of the Executive is secured in various ways. In the first place the Governor is bound by the instructions issued to him on his appointment, while keeping the responsibility of the two parts of Government clear and distinct, to encourage the habit of joint deliberation between himself, his Councillors and his Ministers; and this practice of associated deliberation of the whole Executive, including the Ministers, on both transferred and reserved subjects and in the preparation of the budget operates to unite both elements, though the decision in each case rests with that part of the Executive responsible for the particular subject involved. A second and a more general source of unity lies in the bond of mutual sympathy and common purposes which, as the experience of one year in this province has shown, subsists between the Ministers and the Members of the Governor's Council. Both parties soon realize their interdependence. Both have a common subject, the good administration of the Province. The functions of both are in practice frequently found to overlap, and the expediency of mutual forbearance as an alternative to the submission of their differences to the controlling decision of the Governor is a lesson soon learned by both.

The unity of the executive.

A reference may conveniently be made at this point to the part played by the Secretariat and by Heads of Departments in the scheme of the new constitution. No vital change has been made in their functions. The various well-defined branches of Government's activities such as Education, Agriculture, Prisons, Medical relief, Sanitation, Excise, Co-operation, Police, Forests continue to be administered by Heads of Departments. The Board of Revenue besides being by statute the court of appeal and controlling authority in revenue matters, still performs its old functions of supervising the

collection of Land Revenue, and it controls Government, Wards and Encumbered Estates, Survey and Settlement, Excise, Salt and Income-tax. The reports, complaints and suggestions made by these officers, by the District staff and by local bodies, are still dealt with in the Secretariat by Secretaries and their staff. Besides the two Secretaries in the Public Works Department who are also Chief Engineers, there are now five permanent Secretaries in the other Departments, including the Judicial Secretary, who is also Legal Remembrancer. In view of the heavy work involved by the winter sessions of the Legislative Council an additional temporary Secretry has been appointed for that period. While the Governor in Council, the Ministers and the Legislative Council necessarily originate both legislative and executive measures, the Secretaries to Government still perform the function of a body of expert advisers, who have first-hand knowledge of the administrative problems with which Government deal. The presence of a selected number of these officers in the Legislative Council serves the additional purpose of providing assistance both to the Ministers and the Members of the Executive Council in the exposition of Government policy.

Secretariat and Heads of Departments.

We have seen—to employ a simple metaphor—that the Executive body has two arms which, while each can and does perform separate functions, are yet members of one body, draw their strength from and are controlled by a common head, are of mutual assistance to each other, and are capable of the most effective action only when united. We have also seen that the Ministers form a connecting link between the Executive and the Legislature. The Legislative Council, as will appear more clearly in the detailed description of its activities, plays a very important part in influencing the Executive, district from its main function of legislation. This influence makes itself felt by three main channels. First, the Council may carry a Resolution on any subject, reserved as well as transferred. Though such resolutions are not binding on Government they must in all cases carry weight as the expression of the will of the elected representatives of the people; and it will be found that Government have in fact taken steps to give effect to most of the resolutions carried during the year. The

The Legislature. Its relation to the Executive.

Council Resolutions.

exercise by the Council members of their right to obtain information by means of questions and supplementary questions also serves a subsidiary purpose both in enlarging the Council's knowledge of the functions of the executive, and in bringing to the notice of the Executive those aspects of the administration which are arousing popular interest or criticism.

Standing and Special Committees.

The second channel for the inter-communication of ideas between the two bodies consists in the Standing Committees, of which two, in addition to the statutory committee on Public Accounts, have been constituted, one for reserved and one for transferred subjects. These committees not only, to use the words of the Governor in his announcement of the decision to constitute them, familiarize other non-official members of Council, besides Ministers, with the processes of administration, but also make the relations between the Executive and the Legislature more intimate. These aims have also been furthered in the past year by the appointment of a number of other committees for special purposes, *e.g.*, the Retrenchment, Education, Excise, Tenancy Act Amendment and Agricultural Committees and by the establishment of permanent Advisory Boards on various subjects.

The new scheme of provincial finance.

The third and perhaps the most effective channel consists in the new control over finance which has been granted to provincial legislatures. As the importance of this control by the legislature cannot be estimated without reference to the financial independence now given to provincial Governments, a short description must be given of the nature of the separation which has now taken place between the finances of the Government of India and of the provinces. The object of this separation is not only to remove the necessity for control and interference by the central Government but also to render the provinces independent of that Government for the means of their development. Subject to certain minor restrictions on the use of current revenues, which are explained below, Bihar and Orissa has now independent control over her own sources of revenue.

These may be classified under five heads. The first is the existing provincial balance, in other words the accummulated savings of the past ten years. Complete freedom has been granted to

draw on this balance, subject only to the necessity to give due notice at the beginning of the year to the Government of India, who have moreover the power in a financial emergency to limit temporarily, in the interests of India as a whole, the amount which may be drawn. But it must be remembered that this balance is not a source from which annual charges can be met. The second comprises all the receipts which accrue in respect of provincial subjects, of which the most important are Land Revenue, Irrigation, Excise, Forests and Stamps. Certain specified taxes can be imposed by the provincial Legislative Council without the Governor-General's sanction, for example, taxes on non-agricultural land, on succession, on gambling, on registration fees, on advertisements and on amusements, and certain other taxes for the benefit of local bodies. In other cases the sanction of the Central Government is necessary.

Provincial sources of revenue.

The fourth comprises the proceeds of loans, which can now be raised by provincial Governments in the open market; as well as recoveries of any loans already given out by the local Government. The power of borrowing is restricted carefully by the specification of certain provincial subjects for which alone loans can be raised; and by the necessity to obtain sanction from either the Secretary of State or the Indian Government according as the loan is raised in England or in India. It is further laid down that both sides of Government must participate in the consideration of any proposal for taxation or borrowing. The recoveries of loans, it must be noted, are not a source from which provincial expansion is possible. Their proper use is to liquidate our debt on the loan account with the Government of India and to finance new loans within the province from any accruing surplus. The fifth source of revenue consists in a share of the tax realized on any increase in the assessable income in the province over and above the income taxed in 1920-21. The amount of the share is 3 pies on each rupee of the increase of the assessable income*. Finally, with the reservation made above, the whole of the provincial revenues are available for provincial expenditure subject only to the necessity to discharge two obligations to the Central Government, namely, first repayment of the amount of

* For instance, the estimated assessable income in 1920-21 was Rs. 6,58,96,000; the estimated assessable income of 1922-23 is Rs. 8,30,59,000 showing an increase of Rs. 1,71,63,000. The provincial revenues will be credited with 3 pies on each rupee of this increase, *i.e.*, with Rs. 2,68,000.

the loans previously borrowed from that Government, and secondly payment of the interest on the capital expenditure incurred by the Central Government in the construction of irrigation works in this province. The former will be paid by twelve annual instalments, the latter is a charge fixed in perpetuity. The provincial Government is also under statutory obligation to accumulate by annual instalments a fund to deal with emergencies of famine. This fund is called the Famine Insurance Fund.

These are the main conditions of the financial autonomy of the province. The relaxation of the external financial control of the Secretary of State and of the Central Government has been accompanied by the introduction of internal financial control by the Legislative Council over the Executive. After the Government as a whole, including the Ministers, have agreed on the proposals for expenditure which should be included in the budget estimates, these estimates are presented to the Council in the form of a series of demands for grants. The demands are then voted on by the Council, which may decide that the demands be granted, refused or reduced. In accordance, however, with the practise of the English Constitution proposals for appropriation must emanate from Government, and the Council may not vote for the increase of a grant nor alter its destination. There are certain other limitations on the Council's control.

Internal financial control by the provincial legislature.

First, it is restricted to "voted" heads of expenditure, certain subjects being specifically excluded from the Council's control. These are contributions payable to the Central Government, charges on loans, expenditure of which the amount is prescribed by law, salaries and pensions of persons appointed by or with the approval of the Crown by the Secretary of State; and the salaries of High Court judges. The only other exception in this province is expenditure on the district of Angul, which is excluded as a backward tract from the operation of the Reforms Scheme. Secondly, the degree of control is greater over expenditure on a "transferred" than on a "reserved" subject. The Council's control over the voting of "transferred" expenditure is final, except for an emergency power reserved to the Governor to authorize expenditure even though it has not been voted by the Council, in the interests of

The restrictions placed on this control.

the safety and tranquillity of the province or to enable a department to be carried on. In the case of "reserved" subjects on the other hand the Governor is, as we have seen, primarily responsible, and he is therefore empowered to disregard the Council's vote if to do so is essential to the discharge of that responsibility. It will be seen in the next chapter that these new powers of the Council have afforded its members an opportunity, of which full use has been made in this province, of ventilating their views on every aspect of the administration; while the magnitude of the privilege granted by the new budget procedure can best be expressed in the words used by Lord Sinha, the Governor of Bihar and Orissa, in his inaugural address to Council. "Only those" he said, "who have any experience of the working of responsible government can realize the transference of power from the Executive to the Council which this provision involves. Those who contend that the power reserved to the Governor to disregard such vote under strictly limited conditions detracts to any appreciable extent from the reality of this power conceded to the Council, seem to me determined either to ignore the realities of the situation or deliberately to mislead public opinion".

The importance of Council's budget control.

The powers of control described above are exercised by the legislature at the stage of the passing of the budget estimates, that is to say just before the beginning of the financial year. The effective exercise of these powers is further ensured by the appointment of the statutory Standing Committee on Public Accounts. This Committee is composed of a two-thirds majority elected by non-official members of the Legislative Council, and of a minority nominated by the Governor. The Finance Member is Chairman. The function of this Committee is, broadly speaking, to ensure that money which the Council has voted is spent within the scope of the demand granted. As a necessary corollary the Committee is bound to bring to the notice of the Council all reappropriations from one grant to another, *i.e.*, transfers of money from one general subject such as Medical to another such as Education, and all transfers of money from one particular item within a grant to another item, if such

Safeguards to ensure compliance with Council's wishes.

The Standing Committee on Public Accounts.

transference results in increasing the expenditure on items which the Council has deliberately decided to reduce at the time of the voting of the budget.

In order to enable the Public Accounts Committee to discharge these functions certain reports, known as Audit and Appropriation Reports, are laid before it. These reports are prepared by an independent agency, namely the Accountant-General and the Auditor-General, who are not under the control of the Local Government and who are generally speaking free to criticize its action in financial matters. The Public Accounts Committee scrutinize these reports with a view to bringing to the notice of Council objectionable items of the nature referred to above.

Audit.

The internal control of the Legislative Council is supplemented by the close supervision exercised by the provincial Finance Department. This department is not only responsible for the safety of the Famine Insurance Fund, and for watching the Local Government's balances, but statutory rules compel its advice to be taken on all important questions of finance. It examines all taxation and borrowing proposals, prepares the budget, advises on all schemes for new expenditure; and it must be consulted before variations are made in the emoluments of posts, and before posts are created or abolished or new rights (*e.g.*, mineral or forest rights) granted, or assignments of land revenue made. Finally it ensures that audit irregularities are remedied, and it is its duty not only to lay the Audit and Appropriation Reports before the Public Accounts Committee, but to bring to that committee's notice unauthorized expenditure and financial irregularities. There is thus complete statutory provision for bringing to Council's notice any maladministration of the revenues of the province.

The provincial Finance Department.

To complete our review of the structure of the new constitution a brief reference must be made to the machinery of legislation. Provincial legislatures now have power to make any law and may repeal or alter any law in so far as it affects their own province, except laws of the kinds specified in Section 80A (3) of the Government of India Act, in the case of which the previous sanction of the Governor-General is necessary. These exceptions are, broadly speaking, laws affecting central subjects, laws imposing taxes, with

the exception of certain scheduled taxes, and laws which repeal or alter either certain specified laws made before the commencement of the Government of India Act, 1919, or such subsequent Acts of the Indian Legislature as under those Acts cannot be altered or repealed without previous sanction.

Legislative machinery.

The assent of the Governor is however necessary in all cases after a bill has been passed in the Council; and the Governor, instead of assenting, may return a Bill for re-consideration in whole or in part. He is also bound to reserve Bills of a certain kind for the consideration of the Governor-General, namely, Bills affecting class religions, universities, reserved subjects, light railways and land revenue. Finally, in order that an Act may have validity the assent of the Governor-General must be obtained, and power is reserved to the Crown to disallow any Act to which the Governor-General has given his assent. The Governor has also power in an emergency to override the Legislative Council's refusal either to give leave to introduce or to pass a Bill on a reserved subject in the form recommended by him. If the passage of such a Bill is certified by the Governor to be essential for the discharge of his responsibility, it is deemed to have been passed, and becomes valid as soon as the assent of the Crown, or in emergent cases of the Governor-General, has been obtained to it.

CHAPTER II.

The Legislative Council.

The Legislative Council is the foundation stone of the new structure of representative Government. The examination therefore of the conduct of the first elections and of the present composition of the Council is a subject of the first importance. The elections took place between 29th November and 16th December 1920. The province was divided into 76 constituencies, classified as follows :— There were 66 general constituencies, namely 42 Non-Muhammadan Rural, 15 Muhammadan Rural, 6 Non-Muhammadan Urban and 3 Muhammadan Urban. These general constituencies covered the whole geographical area of the province, each district forming one or more constituencies according to its size and population. There were also 10 special constituencies of which 5, corresponding to the 5 Commissioners Divisions, formed landholders constituencies, while 2 special constituencies represented Mining, 1 European, 1 Planting and 1 University interests.

The elections.

Constituencies.

Electoral rolls were prepared, published and revised for each constituency, the qualifications for a voter in a general constituency being broadly the status of a male resident British subject of 21 years of age of sufficient means to pay a certain minimum contribution to the public revenues. In urban areas the payment of any income-tax or of Rs. 3 Municipal tax qualified a voter. In rural areas the payment of Rs. 12 cess by an estate owner, or of Rs. 100 by a tenure-holder, and by a raiyat of a local cess varying from 2 to 8 annas formed the necessary qualifications. Only a Muhammadan could vote in a Muhammadan constituency and *vice versa*. Candidates for election must have had their names on the electoral rolls, and have been proposed and seconded. Unless they were insolvent or stood convicted of certain criminal offences and misdemeanours there was no additional qualification except a minimum age limit of 25 years.

Electoral rolls.

The elections were conducted in the course of a single day at polling stations. Simple but effective precautions were taken to guard against impersonation and mistakes. Each voter was identified by the local village police; presiding officers supervised the poll on the spot and coloured ballot boxes aided the illiterate. The success of these precautions is indicated by the fact that no case of personation was reported, and only 150 out of nearly 99,000 votes were reported invalid through any technical defect; while only one mishap occurred in the province, in Ranchi, where 62 votes contained in three ballot boxes were withdrawn by mistake. But as the candidate concerned was beaten by a majority of several hundreds, no harm was done.

The poll.

The total electorate for the general constituencies amounted to 325,543, and for the special constituencies to 1,918. The combined total electorate amounted to 1.9 per cent. of the adult male population of the province according to the figures of the recent census taken in March 1921. Of this electorate some 76 per cent. were raiyats, 15 per cent. municipal voters, and 7 per cent. land owners. The enrolment of an electorate on this enormous scale, and the successful conduct of the elections among a population a very large proportion of which was either completely illiterate or barely literate must be admitted to have been a task the accomplishment of which reflects the utmost credit on the central organization by the special Reforms Secretary and on the District staff. No fewer than 98,829 votes were polled in the 46 contested elections, *i.e.*, nearly 41 per cent. of the total electorate of these constituencies. When we remember that at the last general election in England the votes polled in contested elections amounted only to 55 per cent. of the voters, and when we contract the political antecedents of the two electorates of the Etas and West, the onlooker's first feeling on seeing the figures must be of astonishment at such a manifestation of the awakening of the masses in India to a realization of political issues. But it would be a mistake to over-estimate this awakening, or to press the comparison between England and Bihar and Orissa too far. The most prominent feature in an English election campaign is the sharp opposition of two or more party programmes, each candidate representing a different attitude towards the solution of vexed political and economic

Composition and attitude of the electorate.

A comparison with England.

problems of the day. One will stand for protection, another for free trade; one will promise a solution of the housing problem, another will stand for trades unions, another for raising agricultural wages, another for liquor control and so on. But in the first elections to our Legislative Council it was the absence of diverse political issues and the prominence of personal considerations which was perhaps the most marked characteristic. There are various reasons for this. Adherents of the non-co-operation party did not stand as candidates. The results of the propaganda of this party will receive notice throughout the pages of this review of our administration, but as their tenets bind them to refuse to participate in the activities of a form of Government which they profess to repudiate, their influence on the elections, as also on the various functions of the administration was necessarily limited and negative in character.

The effect of "non-co-operation" on the elections.

The influence of the movement on the elections was most felt in urban areas and particularly among Muhammadans, e.g., only 13 per cent. of the electorate voted in the Tirhut and only 27 per cent. in the Bhagalpur Non-Muhammadan Urban Divisions. Gaya Muhammadan and Muzaffarpur Muhammadan Rural Divisions polled only 18 and 11 per cent. of the voters; and the small percentages (19 and 17 per cent.) in North and South Saran Non-Muhammadan rural constituencies may be ascribed to the same cause. That the effect of the movement was greater in the towns than in the country and among Muhammadans than among Hindus is illustrated in the case of Saran, where 42 per cent. of non-Muhammadan rural voters exercised their rights, and 27 per cent. of the same class voted in the urban area, while the parallel figures for Muhammadans in the same district were 28 and 12 per cent. respectively. The election statistics for Chota Nagpur and Orissa indicate that the movement there had little or no effect, and the figures elsewhere point to the general conclusion that the movement in rural areas had little effect except among Muhammadans who comprise about 10 per cent. only of the population.

But while we must necessarily disregard the non-co-operation party, it is not possible to classify the candidates under any other of the accepted party names such as moderates, nationalists, etc. Their election addresses, so far as these have been published, were on almost identical lines. They promised to oppose taxation on

land, to look after the interests of the raiyats, to improve education and sanitation and above all to reduce the cost of living. In a large majority of cases therefore the fate of a candidate was decided by his personal influence and popularity, rather than by any clear divergency of his political views from those of his opponent. But this lack of sharp divergencies of political outlook is, after all, the natural result of the peculiar political background which distinguishes India of to-day from any other country enjoying representative Government. Party programmes arise out of and imply previous representative institutions and a considerable period of popular Government. These conditions are wanting in Bihar, for reasons which are common history. There is, however, one feature common to elections in both countries, and that is class representation. While in England the coincidence of a well-defined political party with an economic class is broadly speaking confined to the distinction between labour and non-labour members, the elected members of our council may be legitimately classified in several classes. Of the 76 elected members, 45 may be said to represent the landowners; 19 professional and urban interests, mostly those of lawyers; 6 the cultivators; 1 the village headmen, 2 European and planting, 2 mining, and 1 trading interests. This classification is necessarily tentative, and based on incomplete data; nor is it always easy to draw the dividing line between land-owners and lawyers, many lawyers having themselves landed interests at stake. But it is clear beyond doubt that the landlords form a compact party with a considerable majority over all others combined. This great preponderance of candidates representing the interests of landowners, elected by voters 76 per cent. of whom are raiyats while only 7 per cent. are zamindars is less remarkable than it appears at first sight. We do not have to go very far back in the history of the British Parliament to find exactly the same phenomenon; and the reasons are the same in kind, though differing in degree, in both countries. The educated men, the men of leisure and property and of local influence, must at first almost entirely exclude, and in most countries have tended for generations to overshadow the direct representatives of the agricultural and labour

Difficulty of classifying candidates on political issues.

Classification according to classes.

Landlords in the majority.

ing classes, who have neither the money nor the time nor the education to take an active part in politics, and who at first find themselves unable to combine and organize sufficiently to choose suitable representatives either from among their own or from the professional class. If this is, as it must be admitted to be, an accepted truism in the history of western representative Government, there is still less reason to be surprised at the occurrence of the same phenomenon in the first Bihar and Orissa Council.

A careful scrutiny, however, of the present political and economic condition of Bihar and of the very elections which have produced what at first sight appears such a disproportionate result will show strong grounds for believing that in this province the period of the raiyat's political infancy will be unusually brief, and that a stage in development which was only traversed in western countries slowly and in the face of great difficulty and considerable opposition may be accomplished in Bihar with startling rapidity. The justification for these conjectures is the existence of a small but well defined raiyats' party, and the significance of certain features of their election. The raiyats' representative in North Bhagalpur obtained 69 per cent. of the votes of the whole electorate. Two still more important successes were those of the candidates for North-East and North-West Darbhanga who obtained the votes of 67 and 50 per cent. of the electorate in the heart of the largest and most powerful estate in Bihar. The success of another raiyats' representative who polled 57 per cent. of the Ranchi electorate is only another indication of the same symptoms in Chota Nagpur. They occurred again in West Patna. No one who looks these facts and figures in the face will find it easy to deny that the raiyats' party is capable of dramatic development in succeeding Councils.

A raiyats' party in the Council.

Two important features of the new Council which remain to be mentioned are the communal elaborates on which it is based, and the racial distinctions which subsist within it. The authors of the Report on Indian Constitutional Reforms have dealt at some length with the reasons which rendered the system of communal electorates necessary. These reasons are not peculiar to this province, but are common to the whole of India, and need only be briefly mentioned here. The defects of the system are acknowledged. Communal electorates are, as the Report shows, opposed to the

lesson taught by history that responsible Government implies an effective sense of common interests. The tendency of such electorates is to encourage in citizens a divided allegiance between the state as a whole and the smaller unit of a particular religion or race, to perpetuate class divisions and to stereotype existing relations. The system has however been retained for reasons peculiar to Indian history, and in fulfilment of a pledge given so recently as 1909 to the Muhammadan community. Hence the classification into Muhammadan and non-Muhammadan constituencies described above and hence, on the same principle, the Landholding, Mining, European and Planting special electorates. Of the elected members of the Council the following is the classification by race :—37 Bihari Hindus, 18 Muhammadans, 10 domiciled Bengalis, 7 Oriyas, 3 Europeans and 1 Ho. The capture of contested seats by 2 domiciled Bengalis is of interest, and future historians may well consider worthy of remark that in the member for Singhbhum is found a Ho representative of the old village headman system. Other minorities are represented by nomination. There are 2 representatives of the Depressed Classes, 2 of the aborigines, and one each of the Anglo-Indian, the Domiciled Bengali, the Indian Christian, the Labouring and Industrial communities. Finally, the 3 Members of the Executive Council are *ex-officio* members, and 13 officials, either Secretaries to Government or Heads of Departments, and 2 nominated non-officials complete the list.

Communal electorates.

Classification by race.

Some minorities represented by nomination.

Concurrently with the elections to the Provincial Council took place the elections to the Indian Legislative Assembly and to the Council of State. To the former Bihar and Orissa sent twelve representatives, elected eight from non-Muhammadan and 2 from Muhammadan constituencies. The qualifications of the electorate and of candidates were based on the same principles as those of the electorate for the provincial Council, with, however, a rather higher standard of income. Of the ten candidates elected, seven may be said to represent landowning and three urban and professional interests. Although 64 per cent. of the non-Muhammadan electors are cultivators none of the successful candidates can be

The elections for the Legislative Assembly.

distinctively classified as their representatives. In the four contested non-Muhammadan constituencies 32 per cent. of the electorate went to the poll, and in the one Muhammadan constituency which was contested 21 per cent. of the electorate polled. This comparatively small percentage is not however surprising in view of the fact that the candidates, though not well known to a large number of their constituents, made little effort, in comparison with English electioneering standards, to canvass their constituencies. For the Council of State three members were elected, viz., 1 Muhammadan unopposed and two non-Muhammadan after contest. The contested seats were carried by two of the greatest landlords of the province, opposed by a Patna barrister. The composition of the present electorate is about 60 per cent. proprietors and tenure-holders, 26 per cent. persons who pay income-tax on an income of not less than Rs. 12,800, and 14 per cent. other classes.

and for the Council of State.

There has been practically no legislation of any importance in the Council during the year. The first Bill to be passed was the Bihar and Orissa Deputy President's Salary Bill, 1921, which fixed the Deputy President's salary at Rs. 3,000 a year. This was followed by the Jharia Water Supply (Amendment) Bill, 1921, which besides rectifying some technical omissions made provision for a Provident Fund for the employés of the Board. The Patna University (Amendment) Bill, 1921, gave rise to some discussion. Under the existing Act all the members of the Executive Council were *ex-officio* members of the Senate. As education has now become a transferred subject the Bill provided for the inclusion of the two Ministers as *ex-officio* members of the Senate, while retaining one member only of the Executive Council to represent European and Anglo-Indian education, which is still a reserved subject in the hands of the Governor acting with one member of the Executive Council. The objection was raised in the Legislative Council that as both the Ministers were already elected members of the Senate it would be more desirable that their retention of their seats should be dependent on election than that they should be *ex-officio* representatives of the Council. But it was pointed out that the effect of converting the two *ex-officio* seats previously held by two Executive Council Members into seats held by the two Ministers,

The legislative activities of the Council in 1921.

who are in practice either nominated or elected Senators, would be to leave their vacated seats available for further non-official representatives of the public. The motion that the Bill should be passed was then carried.

Finally the Bihar and Orissa Municipal Bill was introduced in the Council at the close of the year. This Bill had been under consideration for several years, and is of considerable importance; but as it was still under discussion at the end of the third session, further reference to it must be reserved for a subsequent volume.

The use which the Council has made through budget motions of its new financial control—partial but still direct and effective—over the distribution of Government's energy at its source will be described in the next chapter. But the resolutions of Council carried during its first three Sessions have produced results which perhaps reach further still, and the roots of the power to which resolutions owe their effectiveness are imbedded no less deeply in the soil of the new constitution. The function of resolutions has been the subject of some misconception, and at the opening of the second session a series of questions were asked in Council regarding what was termed the Governor's "power of voting" resolutions carried in the first session. Government's reply corrected the misapprehension of the relation between the Governor and the Council which these questions implied. Resolutions are recommendations only, and have no binding force. The proposal that resolutions should have legal validity and should bind the executive was indeed part of the Congress League scheme, but it was negatived by the authors of the Montagu-Chelmsford Report. The Legislative Council is not responsible for the government of the province inasmuch as it is only a legislative and deliberative body and not an executive or administrative institution. In this respect it is exactly on the same footing as the British Parliament itself.

Council Resolutions.

A large deliberative body is obviously unfitted by its constitution for dealing effectively with the details of administration. Its resolutions must necessarily be confined to general issues, to questions of policy not of detail. But, when all this has been said, there still remains a very real function to be performed by our Council resolutions. If they are recommendations only, yet they

The function of Resolutions.

are authoritative recommendations of a representative body; and if their scope should be limited to questions of policy, yet it is just this general stimulus which the Council can suitably apply to the activities of Government. Though Council resolutions may not yet have resulted in any sensational changes in the administration, the records of the deliberations of the various Legislative Council committees appointed in 1921 bear the impress of an originality and an initiative which is largely due to the stimulus of Council resolutions.

In the next few pages only the general characteristics of the resolutions of the first three Sessions of the Council are described, and a summary given of their scope. But as the full significance of each can only be brought out in relation to the particular activity of Government with which it deals, more detailed treatment will be given to them in later chapters in the paragraphs devoted to their appropriate departments. The resolutions moved during the first three sessions cover a very wide field. The financial situation has been discussed, including some matters concerning the public services from a financial point of view. The medical, veterinary, agricultural, industrial and educational policies of Government have been examined and in most cases criticized. Their excise policy has formed the subject of vigorous attack. An attempt has been made to stimulate and in some degree to direct the activities of Local Bodies. Two questions of vital importance to the administration of criminal justice namely trial by jury and the separation of executive from judicial functions have been raised. The administration of the Court of Wards has been criticized, and the road cess discussed. The composition and proceedings of the Council staff and matters affecting the rights and privileges of its members have been debated. Various resolutions deal with subjects of political interest, and finally several miscellaneous public grievances have been ventilated.

Summary of the scope of the Resolutions of the first three Sessions.

The general character and extent of the work accomplished by the Council cannot be analyzed without giving due prominence to the faults as well as to the merits of its deliberations. Representative Government in Bihar and Orissa is admittedly in its infancy, and the defects of the first Reformed Council may be attributed to inexperience and a misapprehension of the respective functions of

the Legislative and the Executive. Naturally, therefore, through its debates run undercurrents of irresponsibility and unpractical idealism, and there is a tendency to "rush" reforms and to underrate or ignore difficulties, in particular financial, the importance of which only mature experience can teach. There is also occasionally noticeable the natural tendency of a political body to which new freedom has been given, but which is still partially under tutelage, to chafe at the restrictions placed on its freedom and to adopt an attitude of distrust and of exaggerated criticism towards those who still recently controlled its affairs. A few instances will illustrate these tendencies.

Some characteristic weaknesses.

Instances of the tendency to "rush" reforms are common. The resolution in favour of "Retrenchment" as originally worded urged that a committee should complete the comprehensive task of effecting retrenchments in every branch of the administration within the space of 6 months. In the same way District Boards were to be urged to provide every police-station area with a minimum of one dispensary within a year. The same short period was to witness the final abolition of the sale, manufacture and consumption of alcohol and intoxicating drugs throughout the province. Within two years not only was agricultural training to be compulsory in every Middle Vernacular and English school, but every such school was to have a farm attached to it; while a brief space of three months was considered ample for a committee to "settle the whole scheme" of separating judicial and executive functions. It is true that the debates on these resolutions in many cases modified them. Thus the resolution dealing with dispensaries was modified by the alteration of "within a year" to "as early as possible", the excise resolution was lost and that regarding school farms was withdrawn. But these particular instances of a tendency to "rush" reforms constitute only one aspect of the unpractical idealistic outlook to which we have referred.

A tendency to "rush" reforms.

This idealism reached its zenith in the debate on the prohibition of liquor. "I know", said one member, "that this resolution is not practicable, but I still support it simply for the sake of the idealism which is behind it". This is perhaps an extreme instance, but it represents a characteristic feature of the Council debates. The

resolution on medical matters, and the debates thereon, provide an illustration of this attitude. The subject made a powerful appeal to the imagination of the Council, and resolutions were moved dealing not only with the development of medical relief, but also with the system of medicine to be employed and with the medical training of doctors and of the public. Two resolutions advocated the revival of the ancient medical systems of India; and the difficulties in the way were so far forgotten that one resolution sought to "direct" District Boards to open Tibbi and Vedic dispensaries wherever a majority of residents expressed a wish for them; and though this resolution was withdrawn after some discussion, another to the same effect but permissive in its character was carried in the next session. The inference is allowable, after reading the debates, that the carrying of the resolution was due as much to the Council's desire to pay a tribute of respect to an ancient and above all a national system of medicine as to the conviction that the results would be of any real practical utility to the people of the province. More unpractical still was another resolution which sought to find a remedy for the paucity of doctors and the prevalence of epidemics. The remedy, according to the wording of the resolution, was to consist of the starting of schools "all over the province" for a special one year's course of training in the treatment of epidemic disease and for giving "sanitary advice" to the rural population. But, as was urged on behalf of Government in the course of the debate, if the meaning of the mover was that a year's course would be sufficient to turn out a competent epidemic doctor, this was a practical impossibility, while, if the mover's idea was that a few general principles of hygiene and elementary medical treatment should be taught to villagers, the starting of separate medical schools for this purpose was clearly unnecessary, and no indication was given that the alternative policy of utilizing existing schools had been considered or that the financial and other difficulties of such a course had been appreciated. The commonsense of the Council asserted itself, and this resolution was lost. But other instances can be quoted which illustrate a similar vagueness of outlook. The debates on veterinary training were vitiated by the same confusion which had arisen in the discussion of epidemic diseases. Though the resolution under discussion was apparently directed to urging the desirability of a college

Unpractical idealism

and consequent occasional vagueness

for training students as Veterinary Assistants, many of the speeches in its support referred to an altogether different proposition, namely, the value of giving to sons of cultivators sufficient veterinary knowledge to enable them to doctor their own cattle. Vagueness of thought was manifested in a different way in the debates on the Agricultural Department. In these discussions the insistence on the necessity for the production of improved seeds and implements suited to local soils was accompanied by the denunciation of the necessary preliminary, namely local research.

A misapprehension of another kind, due partly to zeal for reformation, carried to excess, and partly to a real misunderstanding of the new meaning which attache sto Local Self-Government was displayed in the attitude of exaggerated parental authority adopted by the Council towards Local Bodies. Instances of this are fairly numerous. In the first Session one resolution was moved "directing" the opening of Tibbi and Vedic dispensaries by District Boards, another "directing" them to devote a fixed percentage of their income to free primary education, and yet a third "directing" them to localize their expenditure on the wards or thana areas from which their income was directly derived. It was pointed out on behalf of Government by the Minister and others that such "grandmotherly" orders constituted a negation of the reality of the transfer of responsibility for Local Self-Government to Local Bodies, that they were unconstitutional in form and bureaucratic in tendency, and the fact that the first two resolutions were withdrawn and the third lost goes to show that the Council were beginning to learn the lesson. But the same desire for excessive centralization was again manifested in the second session when the provision of dispensaries in two particular areas was urged in the Council; and though this resolution was withdrawn after debate an even more mandatory resolution was moved the next day to "direct" District Boards to open dispensaries in certain contingencies, and it was only the votes of official members and of the two Ministers which prevented its being carried. Finally it was left to an official to move an amendment at the very end of the second session by which the word "direct" was removed from yet another resolution, regarding the grievances of cartmen on District Board roads.

and misunderstanding.

In most of the resolutions which have been cited the disregard of financial considerations is a conspicuous feature. Though a vast increase in expenditure must follow the large increases recommended or proposed in dispensaries and medical schools, the building of a veterinary college, the separation of judicial and executive functions, the introduction of Ayurvedic schools of medicine, the creation of new scholarships or the prohibition of spirits, there have been, with one exception, no suggestions made by Council as to how the proposed expenditure should be met. The debates are permeated with the idea that Government has a bottomless purse and that by cutting down the extravagance which has in the opinion of Council characterized Government policy there is plenty of money to be found. Even the immediate removal of one-third of the provincial revenue by the abolition of the sale of excisable articles apparently gave rise to no misgiving in the minds of quite a large minority of the Council. The one exception was the resolution, moved by a private member in the third session to appoint a committee to consider the development of and the possibilities of increasing the provincial revenues from mineral resources. This resolution was carried by 26 votes to 12, and may be expected to produce important results; but the strong opposition with which an amendment urging the imposition of a provincial tax upon coal and other mineral resources was met affords a significant illustration of the attitude which may be expected in the Council towards any definite proposals for taxation.

Disregard of financial considerations.

We have referred finally to the tendency of the Council to be on occasions hypercritical and distrustful of the policy of Government under the old *regime*. Speaking generally, it may be said that more results might have been accomplished and with greater speed in this first year had criticism been less sweeping and comprehensive and had it been directed more to particular features of the administration which in the Council's opinion needed alteration and less to root-and-branch reformation. This generalization does not apply to the resolution on the prohibition of spirit. In this case a revolutionary policy was deliberately advocated and compromise was logically impossible. It applies with more force to such attacks as those made on the Agricultural and Educational policies of Government, but always with this reservation, that though attempts such

In the debates on Education and Agriculture.

as these to secure root-and-branch reforms may produce less immediate and less tangible results than would a less revolutionary and more concentrated attack, they represent a constructive ideal: they are capable of being realized, for they are in the sphere of transferred departments; and they are undoubtedly sincere. But in the three resolutions referred to below distrust may be said to have obscured common sense and criticism to have been carried to excess. The first recommended that the creation of new posts in the Imperial and the Provincial services should be stopped till the question of retrenchments had been dealt with finally; the second that a committee should enquire into the grievances of the Government Press which was on strike at the time; and the third that a committee should enquire into the capacity of the Maharani of Bettiah to manage her estate and into the administration by the Court of Wards during the period of her disqualification. All three resolutions referred to Reserved subjects; all were vigorously opposed on behalf of Government; all were carried, but proved uniformly fruitless as none of them were accepted by the Governor in Council. Government pointed out, in opposing the first resolution, that its acceptance would mean the abrogation by Government of one of the principal functions reserved to it by the new constitution and at the same time Government undertook to consult the Retrenchment Committee before sanctioning fresh appointments carrying a salary of Rs. 100 a month or more. This undertaking was subsequently ratified in response to another resolution on these lines. The resolution we have criticized was more than a recommendation of a general policy. It amounted to dictation to the Executive in a matter of detail. The same may be said of the resolution about the Press. If carried into effect it would have involved the result that the settlement of a pending dispute betwen Government and their employés to which Government were fully committed and in which undertakings had been given on both sides would have been taken out of the hands of the member of the Executive Council responsible for the administration of his department and adjudged by a tribunal which had no such responsibility.

Instances of a hypercritical attitude

In the Resolution for stopping the creation of new posts in the public services.

In the Resolution regarding the Government Press.

and in the Resolution regarding the Maharani of Bettiah and her estate.

The third resolution was opposed on two general grounds by Government. Its acceptance would have implied in the first place a failure on their part and on the part of the Court of Wards to carry out statutory duties imposed on them by an Act of the Legislature; and secondly it would have established the Council's right to examine the confidential affairs of private persons, which Government and the Court of Wards were bound to regard as privileged. Thirdly as Government were in possession of the fullest information on the subjects dealt with in the resolution further enquiry by a committee could elicit no new information. The subsequent correspondence with the Maharaja of Benares, a copy of which was with his consent laid before the Council in the next session, showed that the relatives of the Maharani shared to the full the views expressed by Government in the debate. The attitude of distrust which underlay these three resolutions introduced to some extent an acerbity of feeling into the debates which, it is due to the Legislative Council to say, was, on the whole, absent from the discussions of other subjects, however political or controversial in nature.

The weaknesses of the first Bihar and Orissa Reformed Council have been described above as characteristic of youth. The same may be said of the main elements of its strength. Indeed, underlying these very weaknesses may be found qualities and virtues which constitute some of the most valuable assets of a legislative and deliberative assembly. If idealism is in one aspect unpractical, and apt to lead to impetuosity, to the underrating or misunderstanding of difficulties, and to hasty criticism, it is also the source of initiative and originality, of courage and sincerity; and the Government which can rely on these qualities in its Legislative Council, tempered by the caution and experience which it is one of the functions of its Executive to supply, contains within itself all the elements of strength which make for progress. That these qualities have been displayed to the full in the resolutions and debates of our first Legislative Council few will deny. New ideas which derive additional value from the fact that they are expressions of popular feeling, have been infused into the administration; and the tone of the Council's debates has been on

The main elements of strength displayed in the Resolution and debates

the whole, with the exceptions to which reference has already been made, moderate and reasonable.

and the effect produced by Resolutions.

The value of the work accomplished by the Council in 1921 and the elements of its strength may be seen in the clearest perspective by grouping resolutions under the headings already adopted in the summary description of their scope and by examining briefly their effect on the administration. One of the first resolutions to be moved and carried advocated the appointment of a Committee which should examine the whole question of retrenchment in expenditure. The debates on the resolution reflect faithfully the feelings of the provincial taxpayer. There is the suspicion that wastage is going on, and that with due diligence more money may be made available for popular schemes such as education and medical relief. Expression is given to the Council's desire for further control over financial matters, and to its dislike of discussing fresh taxation without a thorough examination of the provincial finances. There are indications too of some dismay, partly due to a misunderstanding of budget figures, at the apparent smallness of our resources. It may be that the work of this committee, which is still in progress, could have been accomplished, as was urged at the time, by the permanent Standing Committees; but at least it has served a useful purpose in allaying natural doubts and in initiating the Council into the mysteries of the budget, and into the difficulties as well as the possibilities of economy. Even a superfluous Committee revising the work of other Committees provides the wholesome antidote of experience and instruction.

On Financial policy.

On medical relief.

An interesting aspect of the debates on Medical Relief is the proof which they afford of the popularity of rural dispensaries and of the importance attached by the people's representatives to schemes for their development. No fewer than seven separate resolutions were debated; and if they revealed, as has been remarked above, some misconception as to the relation between the Council and Local Bodies, and as to their mutual responsibility for medical relief, the debates performed a useful function in removing the misconception and in clearing the way to the transference of the campaign begun in the Council to the meeting rooms of District Boards. So far from revealing

hostility to Government they served to emphasize an appreciation of Government efforts in the past and the assistance which Council could afford in the future. As a direct result of the resolutions provision of three lakhs of rupees was made in the 1920-21 budget for the assistance of District Boards in extending medical relief, and Boards have been asked to re-examine their programmes.

The debates on Agriculture provide a contrast. For here the Council made a definite attack on Government's policy. Battle had already been joined over the budget motions, and the solitary resolution moved and carried is an implicit criticism of the whole system of the Department. The sincerity of attack need not be questioned.

On the Agricultural Department.

It was pursued along various lines from different directions. Misconceptions there may have been, e.g. as to the possibility of borrowing the results of experiment from other provinces and thus of dispensing with local investigations, and as to the functions which are or could be performed by the Pusa Institute. But the Committee appointed as a result of this resolution to consider the aims and objects of the Department of Agriculture and such reorganization of the Department as may be found necessary to make it subserve those aims is at least unfettered by any limitations as to the scope of its enquiry, and may be expected to alloy the feelings of uneasiness and disappointment with which Council appears to view the paucity of tangible results hitherto produced by the Department in this province. The Committee was still sitting at the end of the year.

The comparative lack of enthusiasm displayed by Local Bodies in developing Veterinary relief has long been a subject of complaint by the head of the Department, and there is no need to enlarge on the advantage to a province which is mainly agricultural if its cause is espoused in Council. It was therefore encouraging to find that a resolution directed to the speeding up of veterinary dispensaries was moved by one of the raiyat's representatives, and that the opening of a Veterinary College, proposed by the same member, was supported by the Council.

Veterinary matters.

It is, however, in the sphere of Education that we may expect to find the most radical changes as a result of the transferrence of control to the Minister, and in no other direction has the stimulus applied to the administration by the initiative of the new popular

assembly been so marked. Thirteen separate resolutions have been moved and discussed. The debates, like those on agriculture, contain a definite attack on Government's policy; but they are even more interesting, for they also contain the germs of a constructive policy. There is not only an attack on waste and the suggestion to limit building and inspection charges, but a definite attempt to define the relative importance of primary and secondary education, to suggest improved curricula, to introduce new religious, agricultural and vocational training, to increase the grants of scholarships to aborigines, and to develop Government's control over Middle English Schools. Some of these resolutions were withdrawn or lost because the proposals were found to be impracticable; but others have already borne fruit. Scholarships and free studentships have been created for the aborigines of Chota Nagpur; and the deliberations of the Education Committee, which is still sitting, on the various subjects raised in the Council, can hardly fail to result in the introduction of new experiments in educational policy of for-reaching effect. In University matters the reduction of the age limit for the Matriculation Examination, a change of great practical importance, has already, on the recommendation of the University, followed the Council's Resolution on the subject, and the long debate on the question of an honorary Vice-Chancellor for the Patna University illustrates the popular interest taken in University matters. It incidentally is also an example of a debate which, though highly controversial, was conducted with moderation and good feeling. Government have subsequently stated that it is their present intention to give effect to the resolution when there is a prospect of a vacancy.

On educational policy.

We have referred to the resolution on Total Prohibition as an instance of the unpractical idealism of the Council. But the Council as a whole cannot fairly be accused of ignoring the practical difficulties of carrying out the policy advocated. For the loss of the Resolution by 22 votes (13 of these were official) must be ascribed to a realization of these difficulties. It is difficult to foretell at present the influence which this debate will have on the opinions of council members and of their constituents, and ultimately on Government's policy. In the first place the limit of one year fixed as the period within which the province should "go dry" rendered

the loss of the resolution almost a foregone conclusion on practical grounds; and it is for this reason impossible to gauge accurately from this debate alone the real feelings of Council on the desirability of a policy of gradual but ultimate Prohibition. Secondly the lack of elasticity in debate and the prevalence of set speeches over spontaneous discussion was even more marked in this than in other debates, and it is possible that the arguments adduced in Government's reply, though their influence can hardly be traced in the speeches of later speakers, may have had some effect. Thirdly a point was raised on behalf of Government which may be found to be of vital importance, namely that this Council does not adequately represent the classes whom a radical change in Excise policy would chiefly affect. To this we may add the point made early in this Chapter in discussing the representative character of this Council, namely that the representatives of particular constituencies did not in most cases present to their constituents any definite political programme, and it may well be that a Council Member who advocates Prohibition will encounter unexpected opposition from his constituents before the next elections. The debate however has not been without direct results, for a Committee has been appointed the terms of reference to which include the consideration of the question whether total prohibition is practicable, and if so how and by what stages it should be carried out, and secondly, if total prohibition is not recommended, the consideration of the amendments necessary in Excise Acts, of changes in the incidence of duties, in hours of sale and in the auction system, and of the method of controlling the number and situation of liquor shops.

On excise policy.

Comments have already been made on the "grandmotherly" attitude adopted in the Council towards Local Bodies in some of its resolutions. But changes of vital importance have followed the Council debates. A resolution recommending the introduction of a liberal measure of the right of election of members has been followed by the extension of the elective system to Monghyr Local Boards. The further extension awaits the amendment of the Local Self-Government Act, and an undertaking has been given that the question of direct election to District Boards will be considered when this Act is amended. The resolution regarding non-official Chairmen, to which

On Local Bodies.

reference has been made above, has been followed by the grant of the right of electing non-official chairmen to Gaya, Shahabad, Purnea, Monghyr, Balasore and Puri District Boards, which expressed their wish for it; and the privilege of electing their own Chairmen is being conferred on all municipalities who have asked for it. Finally the Council's resolution asking for an enquiry into the practice of District Boards in constructing and repairing *liks* for bullock traffic has called attention to a real popular grievance of old standing.

On the Administration of Justice.

The Council has lost no time in crystallizing its views on two of the most important problems of the administration of justice in this country, namely trial by jury and the separation of executive and judicial functions. The debates on these subjects, which were characterized throughout by their sincerity, logical consistency, and democratic spirit, have already resulted in the reconsideration by Government of the first question and the extension of the jury system to seven new districts, and in the appointment of a representative committee to consider the second A resolution recommending that the senior munsiff in each subdivision should be vested with power to try suits up to the value of Rs. 2,000 was withdrawn on the assurance of Government's sympathy and that the arguments delivered in the debate would be brought to the notice of the High Court.

And in the ventilation of various public grievances, political and otherwise.

The large number of resolutions in which various public grievances on miscellaneous matters have been ventilated form not the least interesting part of the proceedings of the Council. Perhaps of all the debates of this first year the one which will be read with most interest by future students of Indian history is that on Female Suffrage. This resolution stands on a diffierent footing from any other; for a resolution on this subject is by special statutory order made binding on Government, and the knowledge of this gave additional seriousness to the debate. Though Government as such took no part in the discussions or voting, individual members spoke and voted on either side, and after a debate which elicited many interesting individual views on the social position of women in India the resolution was lost by ten

Women's franchise.

votes only, three of which were those of individual official members. Among distinctively political matters one of the most interesting is the motion for adjournment for the purpose of discussing Government's attitude towards the non-co-operation movement, which was followed shortly afterwards by a resolution on the same subject. The debate on the motion arose out of the issue by Government of a circular in which Government servants were urged to use every means in their power to combat the non-co-operation movement. The main point made by the mover was that though he and his supporters in Council were at one with Government in their desire to suppress violence, he took exception to any general condemnation of the methods of non-co-operation. The debate, in spite of the highly controversial nature of the subject, was characterized by studied moderation in the speeches both of the mover and of the other speakers. It served to remove misunderstandings and to emphasize rather the essential agreement between the views of the Council and the Executive in this difficult matter of administration than their differences. The same may be said of the subsequent resolution, the withdrawal of which after prolonged discussion points the same moral. The subject of non-co-operation was also raised in a resolution of the third session which recommended but all political prisoners, including non-co-operators, should be treated as in England, and should in general be treated as European prisoners. In their case, though council was assured of the sympathy of Government with the spirit of the resolution, the mover refused to withdraw, and the resolution was carried.

The Government and Non-co-operation.

Political prisoners.

Another resolution of great interest was that recommending the amalgamation of the Oriya-speaking tracts at present existing under the administration of Madras, Bengal, the Central Provinces, and Bihar and Orissa, under one Government. It afforded a striking example of the unity of opinion with which the Council was prepared to support a desire for "self-determination", a desire, it should be mentioned, to which special reference was made in the Montagu-Chelmsford report, and of the strength of that desire among the representatives of Orissa in the Council. The resolution was carried, and the other provincial Governments concerned are being

The amalgamation of Oriya-speaking tracks.

consulted in the matter, as this step and the subsequent reconsideration of the question by the Council in the light of their replies are necessary preliminaries to a formed application to the Government of India.

Among variaus resolutions regarding matters of public interest the following deserve special mention. One resolution recommended that instructions should be issued directing District Officers and their subordinates to obtain assistance from influential citizens in quelling disturbances. The debate was again moderate in tone; the resolution was welcomed by Government as an endorsement of the policy which was already being pursued; and a circular has subsequently been issued to the effect that the resolution has been accepted and represents Government's policy in dealing with apprehended disorder. There have been two significant discussions on the subject of chaukidars. One took the form of a motion for adjournment in which a protest was lodged against a proposed enhancement of the pay of chaukidars in Tirhut, and the other followed on a resolution for the abolition of the chaukidari tax in Orissa. In neither case did the debates produce many speakers, and their significance lies in their expression of the prevalent unpopularity of the chaukidari tax, and the dislike which is felt in some quarters to the subordination of the chaukidari force to the police. They gave both Government and the Inspector-General of Police an opportunity to justify the existence and administration of the force, of which full use was made; and the resolution was lost.

Assistance to District Officers in quelling disturbances.

The Chaukidari force.

Indirect criticism was also levelled against the police in the debates on the system of *begari*. The custom under which carts and coolies are impressed for the assistance of Government Officers on tour, and arrangements made for the supply of *rasad* is, like the giving of *dalis*, one of the oldest in India. In this province the acceptance of *dalis* by officials was prohibited in 1919 by specific order. The *begari* grievance rests on a somewhat different footing. The Inspector-General of Police in replying to the resolution pointed out that under an old Regulation of 1886 the police are still under statutory obligation to give reasonable assistance to all travellers in prosecuting their route, and that rules have been framed in the Police Manual to present abuse by the police of their privileges. He also main-

Begari.

tained that the lack in the past of assistance from the more enlightened public in correcting the abuses which admittedly existed had made the task of the police a very difficult one. As a result of the debate Government have considered the possibility of abolishing the statutory authority for such requisitions, and have decided that it must be retained, as it is essential that officers of Government should be able to move about without delay in the discharge of their official duties, and that they should be safeguarded from possible attempts for instance to delay the local investigation of a crime by the withholding of transport facilities for baggage. At the same time Government have issued circular instructions that all possible care must be taken to avoid impressing bullocks and carts kept for private use and not for hire, or exclusively appropriated for the purposes of agriculture, which are entitled under the law to exemption; that rates should be prescribed annually by the District Officer in consultation with the Chairmen of local bodies, and that for facility of check of possible malpractices all requisitions should be made in writing and should be filed for examination by inspecting officers.

The raising of this subject in Council is a significant instance of the opportunities which are afforded under the new *regime* for the voicing of popular grievances for which in European countries an older and more highly developed Press provides a ready outlet.

Other popular grievances.

Similar subjects raised in Council this year were the malpractices of deed writers in Sub-Registrar's offices, the grievances of the public against the Bengal and North-Western Railway with regard to drinking-supply, accommodation, lighting and sanitation, the improvement of the postal service in villages, the opening of canal service roads to traffic, the contamination of the Ganges water near Digha Ghat, and the necessity for making the East Indian Railway Bridge at Koilwar on the Son river fit for vehicular traffic.

Floods and irrigation attracted considerable attention. Under the stimulus of a Council resolution a committee has been appointed to report on the eligibility for remission of revenue of those parts of Balasore and Cuttack which were affected by last year's floods;

Floods and irrigations.

and the debate on the possibility of re-opening the dried-up beds of the Phalgu river for the benefit of certain portions of the Patna and Gaya Districts afforded a useful opportunity both for a discussion of the

larger irrigation problems of South Bihar and of the steps taken by Government in the past to solve them, and for obtaining the support of the Council to Government's proposal to constitute a committee to deal with this important problem. The prospects of the Indian and of the Provincial Civil Services have been discussed in three important debates. In one the recommendation was made that posts should be thrown open amounting to 25 per cent. of Indian Civil Service posts to members of the Provincial Civil Service. Though it was pointed out on behalf of Government that such a policy would materially injure the future prospects of Indian members of the Indian Civil Service, the resolution was carried. This result may probably be regarded more as a protest against any further delay in the Indianization of the Indian Civil Service than as the expression of a deliberate policy of favouring Indians of the former service at the expense of Indian members of the latter. On any other supposition it is unlikely that so short-sighted a policy would have commended itself to the good sense of a majority of the Council. The action which Government proposed to take on the resolution which relates to a central subject, was not known by the close of the year. Another resolution was moved in the third session recommending that Government should obtain the sanction of the Standing Committee on Transferred or Reserved Subjects as the case may be before appointing any member of the Indian Civil Service to posts not reserved for them under Section 98 of the Government of India Act. Government pointed out in the debate that this would imply the exercise by advisory committees of distinctively executive functions, and the power to veto the actions of the Governor in a matter which is not even entirely within his own competence. The resolution was lost, but the majority was an official one. A more practical question was raised in a resolution recommending the adoption of competitive examinations as the method of recruitment for various provincial services. Government expressed their willingness to be guided by the opinion of council on the general question, but explained the practical difficulties in the way of giving effect to sweeping changes. The Council showed its appreciation of Government's attitude and explanation by withdrawing the resolution. To a similar appreciation of Government's past policy may be partly ascribed the Council's

The public services.

Competitive Examinations for Provincial Services

The depressed classes.

apathy in two debates on subjects of great general interest, namely the condition of the depressed classes and the grievances of tenants.

The grievances of tenants.

But in both these cases the thinness of the debate was also due to the fact, to which attention has already been called, that neither the depressed classes nor the tenants are quantitatively represented in the Council.

A reference has been made in the first Chapter to the constitutional right of members of the Legislative Council to obtain information by asking questions and supplementary questions. The liberal interpretation placed on this right by some of the members was made the subject of comment by the President at the end of the second session. No fewer than 639 questions, most of which contained several clauses and sub-clauses, were received in the second session, and two members alone were responsible for as many as 264 questions. Though a great number of the questions asked during the first three sessions have undoubtedly served a useful purpose in supplying members with a basis for suggesting changes in the policy of various Departments of Government, it is noticeable that the information required even in this type of question could have been in many cases obtained by the members themselves from the Annual Reports of Heads of Departments. In still more cases a great deal of unnecessary work has been given both to the officers of Council and to the Secretariat by the want of care with which the questions have been formulated. In the second session less than 50 per cent. of the questions asked could be admitted under the standing orders and rules without modification, and out of the 264 questions put by two members only 103 were in order, 141 had to be recast, revised and in many cases rewritten by the President, and 20 had to be finally disallowed. Finally, though the replies to questions asked were utilized in many cases in subsequent debates on resolutions or Bills, there was an appreciable number of questions which increased the work of the Secretariat staff without any useful result.

Council questions.

CHAPTER III.

Finance.

The problem of finance.

An outline has been given in the first chapter of the scheme under which the finances of this province have now been separated from those of the Government of India, and we have seen that Bihar and Orissa is now left in the more or less undisturbed possession of her own current revenues, supplemented by the unspent balance of the last ten years, and that the power has been given her to increase her revenues from new taxation, and to raise loans in the open market. There remain to be indicated the practical financial problems to which this new independence gives rise.

The three main elements of the problem.

The finances of Bihar and Orissa present difficulties which exceed those with which any other province is faced, owing to three main distinguishing features. In the first place the Government of Bihar and Orissa is relative to its size and population the poorest in India. Secondly it is the youngest major province and is therefore faced with the necessity for abnormal initial expenditure. Thirdly its revenues suffer from a lack of elasticity which gives additional significance to the contrast between the paucity of the revenues of the province on the one hand and its need for development on the other. A few statistics and illustrations will make these points more clear.

The poverty of Bihar and Orissa.

British territory in Bihar and Orissa contains a population of some 34 millions, and the normal annual expenditure by Government per thousand of the population has been calculated at about Rs. 1,229 only or a little over Rs. 1-3-0 per head. The normal expenditure per thousand persons is calculated to be only Rs. 17 a year on Sanitation, Rs. 30 on Medical relief, and Rs. 157 on Education. The total expenditure per thousand works out at about one-fifth of the expenditure in Burma, less than one-quarter

of that in Bombay, and less than half of that in Madras. These figures give some indication of the meagreness of our resources as a province. The necessity for heavy initial expenditure hardly requires demonstration. The development of the province was not only seriously hampered by its past attachment to Bengal, which tended not unnaturally to devote a larger share of its resources to the neighbourhood of its capital city than to its out-lying districts, but it suffered an additional blow at its separation. For when this separation took place in 1912, while our provincial expenditure was estimated for the first year at 284 lakhs, or 8 lakhs per million compared with 13 lakhs per million of the Bengal population, Bihar and Orissa was at the same time deprived of a University, of Presidency hospitals, of a Medical College, of a Veterinary College and of all the other provincial institutions constructed in the past from the joint revenues of the combined province. Finally a burden, shared it is true by other provinces, but which is none the less an appreciable drain on our slender provincial purse, is imposed by the necessity to repay the amount of loans drawn in the past from the Government of India, and to make payments to the Famine Insurance Fund. The repayment of the former in equal instalments will take twelve years and amounts in all to about 65 lakhs. The latter will require annual payments of Rs. 11,62,000 until the fund has accummulated 70 lakhs. Further payments will then be unnecessary except when the fund has been depleted by expenditure on famine relief.

The necessity for abnormal initial expenditure.

The third feature of our provincial finances is the lack of elasticity in the provincial revenues. The greater part of the province is permanently settled, which means that the amount of land revenue is fixed and is not liable to periodical revision. With the change in economic values which has taken place in the last century, that fixed amount has become an infinitely smaller burden of taxation than it was originally. Moreover the amount of surplus wealth available for additional taxation is to a great extent limited by an important economic factor. The mass of the population relies on agriculture for its livelihood. But the density of the agricultural population in Bihar and Orissa is already

The lack of elasticity in the provincial revenues.

as great if not greater than the soil can bear. In Muzaffarpur a cultivated area of 1,555,291 acres supported in 1911 a population of 2,295,000, in Saran an area of 1,284,010 acres supported 2,016,000 persons, and in Patna an area of 1,073,593 acres supported 1,118,374 persons. These are typical but by no means exhaustive instances, and though the 1921 Census figures are not yet published in detail the fact that the total population has decreased by 1.4 per cent. since 1921 indicates that the agricultural population has reached the limit of its capacity for expansion.

Mineral resources.

The real wealth of the province may be said therefore to lie not in its cultivated area but rather in its vast mineral resources in Chota Nagpur. The extent of these resources is outlined in the next chapter in the paragraphs which deal with the Department of Industries. More than half the coal of India is contributed by this province and increasing quantities of the material for India's industries and railways are issuing yearly from Messrs. Tata's Iron and Steel Works at Jamshedpur. But from the point of view of provincial finance the profit derived from these industries is at present almost negligible.

Bihar and Orissa's small share of the income-tax on large commercial concerns.

This is partly due to an inequality in the present division of the proceeds of the income-tax, on which it is necessary to lay some emphasis. The profits made from the mineral resources of this province are largely earned by firms whose central offices are situated either in Calcutta or in other large towns in other provinces. But under the Income Tax Act the tax is paid in the province which contains their "principal place of business". The interpretation hitherto placed on this provision of the Act is responsible for the fact that the share of the profit from income-tax which the province will receive in the current year is estimated at less than two lakhs of rupees. It is therefore of interest to note that as a result of correspondence with the Government of Bengal during this year it has now been admitted that the income-tax on the salaries of employés of such firms is payable in Bihar and Orissa, and that the wider question of the interpretation to be placed on the words "principal place of business" is under the consideration of the Government of India. In the meantime the question of the

possibility of imposing a tax on coal has already been raised in the third session of the Legislative Council, to which references are made elsewhere.*

As we have seen, little can be expected from Land Revenue, as the annual increase from the comparatively small area under temporary settlement is unlikely to exceed more than Rs. 40,000. Forests may in the future yield an increased revenue; but before this can happen much time must necessarily elapse. Registration fees can be increased, but this is hardly likely to produce a material increase in revenue. The raising of the scale of Court-fees has been considered by Government but has yet to find support in Council. The expansion of revenue from Irrigation is largely conditional on the ability of Government to incur heavy capital expenditure on the extension of the present canal system. Finally the attitude which the present Council has adopted towards the Excise question makes it impracticable to count on any increase in the Excise revenue.

The financial position during 1921.

In the face of these obstacles to the expansion of the provincial revenues it is not surprising that the present financial position has given rise to wide-spread uneasiness in Council. At the beginning of the financial year 1921-22 the provincial opening balance stood at a little over a crore. When the budget was introduced in Council it was estimated that recurring revenue would amount to well over 471 lakhs while expenditure was estimated at about 467 lakhs. It was therefore expected that there would be a surplus of about 4 lakhs. But by the end of December the situation had materially altered. As a result of the non-co-operation movement a reduction of about 34 lakhs in the estimated receipts from Excise revenue alone appeared to be necessary, while stamps were realizing 9½ lakhs less than had been expected. On the expenditure side, though the Public Works Department programme had been cut down by nearly 14 lakhs, and expenditure as a whole by nearly 22½ lakhs, the revised estimated expenditure exceeded revenue by nearly 46 lakhs. The provincial opening balance of a crore was therefore estimated to be likely to fall to about 55 lakhs

* *See* Chapter I, page ..... and Chapter IV, page .....

by the end of the financial year, *i.e.*, by March 21st, 1922. It will easily be seen that in the coming year with a normal expenditure upon existing services which now amounts to over 473 lakhs and with the necessity, due largely to the non-co-operation movement, of making a conservative estimate of recurring revenue, it will be necessary to tap new sources of revenue before any new schemes are taken up.

Council's insistence on retrenchment.

The necessity for this course has been but dimly realized in the Council during the first three Sessions; nor are the reasons far to seek. In the first place the intricacies of finance and of budget procedure were admittedly a closed book to the great majority of Council members. This is perhaps the most striking feature of the budget debates. They are full of requests for information, often on the most elementary matters such as the meaning of budget terms. This attitude of enquiry was inevitable, and was frankly admitted, in many cases motions to reduce specific items being withdrawn as soon as the meaning of the demand was explained and its necessity made clear. But it is also the instinctive tendency of human nature to be suspicious of what it does not understand, and the second characteristic of the budget debates, namely distrust of the financial policy of the late Government, may be justifiably ascribed, at least in part, to Council's inexperience of the subject. In the third place "retrenchment" has been the catchword of oppositions ever since the birth of Party politics, and the Bihar and Orissa Council was no exception to the rule. We have referred in Chapter II to the fact that a common feature of the election addresses of candidates to their constituents was the cry of "no taxation on land", and it is hardly a matter for surprise that the elected representatives of an agricultural and in the main of a poor community have been averse to the bare suggestion of taxation, at least until they have had time to satisfy themselves by a close scrutiny of the financial situation that no other course is practicable.

The general budget discussion which preceded the motions on the demands for grants elicited many of the points which were subsequently pressed in the form of resolutions, and which need therefore be only briefly referred to here. The question of excise

policy was, for instance raised. In educational matters criticism was directed against the excessive expenditure in the past on secondary to the detriment of primary education. The Agricultural Department was attacked, and the "brick and mortar" policy was assailed from every side in a comprehensive campaign against the Public Works Department. Finally, the subject of taxation was touched upon, and while the suggestion was made that the mineral wealth of the province had not been sufficiently exploited by Government, considerable reluctance was displayed to support another proposal for raising revenues by raising the value of Court-Fees.

Some points raised in the general budget discussion.

The ability of the Council to use to the full its new powers of control over the budget was unfortunately hampered this year by the fact that the new Council was not constituted until it was too late for either the Ministers or the Council to be consulted in the preliminary stages of the preparation of the budget estimates, which had to be submitted to the Government of India by the 1st January. The presentation of the budget to the Council was delayed by a strike in the Government Press. None the less the motions on the demands for grants served two important ends. They enabled Council members to ventilate their views on financial policy and their attitude towards certain aspects of the administration of the various departments, and they resulted in substantial reductions in expenditure. The total reductions made by Council amounted to more than 4½ lakhs. Nearly 2 lakhs were reduced by the postponement of the Orissa Settlement operations. The discussion of this subject revealed pronounced opposition to Settlement policy as a whole, an attitude which reflected significantly the feelings of the landlord majority in the Council. Grants for new buildings were the next subject of attack. A motion to reduce the grant for police buildings was lost by one vote only, and grants for other buildings were successfully opposed. These included a Circuit House at Gaya, a residence for an Agricultural Engineer, a guest-house at Sabour, a residence for an Economic Botanist, and the acquisition of land and buildings for the Veterinary Department at Muzaffarpur. In addition to these items, which amounted to more than a lakh,

Budget motions.

Some reductions made in expenditure.

a sum of Rs. 60,000 was reduced from the allotment for metalled roads. Though a motion to cut down the extra grant for the Publicity Board was lost, the opportunity was taken by Council to criticize with considerable freedom the manner in which Publicity work was being carried on; and subsequent to the debate the staff has been reduced by the abolition of one highly paid post. The reduction of the grant for an experiment in extensive sanitation in Gaya district by Rs. 10,000 showed that Council's policy of retrenchment was not confined to Reserved Departments. A petty reduction of Rs. 5,000 for the staff of Central Jails afforded an illustration of the uncompromising attitude at first taken up towards any increase in expenditure on staff; but this grant was subsequently restored on the recommendation of the Standing Committee on Reserved Subjects. This attitude was again forcibly illustrated in the reduction by Rs. 30,000 of the demand for an increased grant to enable effect to be given to a decision to improve the salaries of the Provincial Civil Service, and it was left to the same Standing Committee to satisfy Council of the necessity for the demand. The reduction was subsequently made good by Council, which voted a supplementary demand for this purpose.

Reduction of the loan to the Jharia Water Board.

Finally the insistence of the Council on the reduction of the proposed loan of 34 lakhs to local bodies, of which 30 lakhs was earmarked for the Jharia Water Board, by no less than 20 lakhs, is an extreme instance of the length to which the Council was prepared to go in its desire for economy. It was pointed out on behalf of Government that the scheme for which the money was required was one of the biggest schemes for the improvement of rural sanitation ever introduced in India; that the provision of a pure water supply for the working classes in the coal-fields was essential to their health, that the scheme had been pronounced a safe and a sound one by expert opinion; that such opposition as had been offered to it outside the Council was due to the reluctance of the mine owners to pay the price for the betterment of their labour force; and finally that from a purely financial point of view Government would obtain a fair return for their money. It is difficult to say what were the main considerations which led the Council, in the face of these arguments, to reduce the grant. But apart from doubts cast upon the ability of the Water Board to repay the loan, which were fully met in

Government's reply, the main points urged were the alleged extravagance of the scheme and that an enhanced cess, which would ultimately fall on the consumers, would have to be imposed before the scheme could be completed; and it is a justifiable inference from the Council's consistent attitude towards similar questions in the course of the first three sessions that these two considerations exercised a considerable influence on the final vote.

The work of the Retrenchment Committee.

The Retrenchment Committee, the appointment of which was recommended early in the first Session, is still sitting. A general discussion was held in the earlier meetings as to the scope of the enquiry, and in the subsequent meetings a number of witnesses have been examined, including the Conservator of Forests, the Director of Industries, officers of the Public Works Department, the Registrar of Co-operative Societies and the Director of Public Instruction. The object of the enquiries made has been to ascertain whether there is not room for retrenchment in carrying on the work of various Departments of Government. The work of the Committee was delayed at the end of the year by the promotion of the Finance Member, who was its president, to be Acting Governor.

The appointment of Standing Committees, one on Reserved and the other on Transferred Subjects has been mentioned in Chapter I as one of three supplementary channels through which the Legislative Council is able to influence the administration of the province, in addition to its power to do so through legislation. The Council's exercise of its power through the first channel, namely through the carrying of resolutions, has been described in Chapter II, and we have just dealt with the second channel, which consists of the voting on the demand for budget grants. The Committee on Reserved Subjects, which held its first session in April, consists of non-official members of the Legislative Council mainly elected under the presidency of the senior member of the Executive Council. It sat four times during the year. Most of the important schemes which had not been included in the budget were laid before it and also certain of the budget schemes, especially those involving buildings, which the Governor directed should be referred to it in pursuance of an undertaking given to the Council

The work of the Standing Committee on Reserved Subjects.

in view of the impossibility of consulting the Committee before the budget was framed. The Secretaries and Heads of Departments concerned with any particular item of business were required to attend the meetings in order to support Government's proposals and to explain their scope. We have already referred to the action taken by the Committee in recommending to Council that a supplementary estimate should be passed to give effect to improvements in the pay of the Provincial Civil Service. Support was also accorded to proposals to increase the pay of the Bihar and Orissa Forest Service, of forest guards, of police head constables, and of jail warders. Several proposals for new buildings were examined, and a supplementary demand for expenses in connection with the Prince of Wales's visit was recommended. But the most important subject discussed was the proposal, to which a brief reference has already been made, to amend the Court Fees Act. While a considerable number of members recognized that an enhancement of Court Fees might sooner or later be necessary the general feeling was that an alteration in the rates at the present time would be inopportune. A similar attitude of caution was maintained towards a proposal to create a new post of Utilization Officer in the Imperial Forest Service. While admitting that an officer should be employed in developing the productive work of the department the committee recommended the placing on deputation of one of the officers already in the cadre until further experience should have been gained.

The Standing Committee on Transferred Subjects.

The Standing Committee on Transferred Subjects consisting of non-official members of Council under the presidency of one of the Ministers, met first on July 15, 1921 and held six sessions during the year. Several important projects were laid before it. Schemes for a Silk Institute at Bhagalpur, for a Cotton Station at Ranchi, for an increased Government contribution to the Jamalpur Technical School, for a Government sugar factory in South Bihar, for increasing the staff of the Director of Industries and for paying stipends to artizans under training at the Dehri Workshops all found support. On the other hand the committee opposed any general increase in the fees or remuneration of vaccinators, and recommended a modification of Government's proposals to increase registration fees. It should be mentioned that this proposal is not one which Government are bound to submit to the vote of the Council as Government have in this case full power to increase the

fees without any reference to the Council. Both in this matter, and in their attitude to the proposed enhancement of Court Fees, the Standing Committees reflected the attitude of Council towards taxation proposals to which reference has already been made. The main object of both committees, no less than of the Retrenchment Committee itself, appears to be to economize. They supported, it is true, several schemes involving increased expenditure, just as the Legislative Council passed several resolutions asking for expensive extensions of education and medical relief. But apart from the need for retrenchment which they underlined so heavily they never seriously tackled the financial problems to which the limited provincial revenues and the Council's recommendations for increased expenditure have given rise; nor did they admit except halfheartedly that new sources of revenue need be tapped.

The dangers of a policy of "retrenchment and no taxation."

But there is a limit beyond which retrenchment can only be carried out at the expense of efficiency, and beyond which economy becomes dangerous. In the outlines which follow of the attempts which Government, with the assistance of Local Bodies, have made to solve the economic and social problems of this province there will be found numerous illustrations of this truism. There is a point at which the reduction of the salaries of Government servants means not only the loss of efficiency but an increase in corruption, and at which a reduction in their number may result in the preventible loss of thousands of valuable lives either of men or of domestic animals. The saving of a few thousands of rupees in the reduction of a staff of scientific experts may postpone for a generation discoveries which would have doubled the outturn of a staple crop. Delay in the development of communications may deal a deathblow to indigenous industries, which would have provided employment for the surplus agricultural population. When these truths are self-evident to the people as well as to their representatives in the Council, taxation will no longer be a word which members of the Council are afraid to use, and the solution of the financial problem will have begun in earnest.

CHAPTER IV.

Government and Economic Problems.

Climatic conditions in Bihar and Orissa were on the whole favourable to agriculture during the year. Owing to the failure of the autumn rains in 1920 the area under *rabi* crops was less than usual; but a heavy fall of rain in the third week of January raised the estimated yield per acre to not much below normal. This fall also enabled paddy land to be ploughed and was thus invaluable in Chota Nagpur and in Orissa where the area of paddy sown broadcast depends on the possibility of cultivating the land in good time. There were the usual scattered showers in May in the northern and eastern parts of the province, but elsewhere there was little rain until the monsoon broke in the second week of June with a heavy fall in Orissa and light showers elsewhere. The fall became general in the end of the third week of the month. A break at the end of June gave the *bhadai* crops a good start, but was prolonged in Orissa and Chota Nagpur till nearly the end of July with the result that transplantation of the paddy crops was unduly delayed. General rainfall in South Bihar on July 11th was less beneficial than it would have been elsewhere as paddy is not transplanted so early in South Bihar as in Orissa. Another break after the first week in August further delayed transplanting in Orissa over a considerable area until September. Elsewhere the August rainfall was above the normal. There was more rain than usual in September except in parts of Chota Nagpur, and there was useful rain, though rather less than the average in quantity, in the first half of October. The general result of the distribution of the rainfall was that while paddy was sown broadcast at the normal time in Chota Nagpur and Orissa, sowing was late elsewhere, and transplanting was late everywhere except in North Bihar. The late monsoon favoured *bhadai* crops in the south of the province, where they are of the least importance, and paddy in

Rainfall and harvests in 1921.

North Bihar where it is less important than *bhadai* and *rabi* crops. Paddy however did well in South Bihar and in the large areas sown broadcast in Chota Nagpur and Orissa, and the October rainfall provided the moisture necessary for *rabi* sowings throughout the province. The outturn of *bhadai* crops was estimated at 10 per cent. over the average. Paddy was estimated as normal and *rabi* crops made a good start on an approximately normal area.

General Economic conditions in 1921.

There was considerable distress in Orissa at the beginning of the year, due to three separate floods in July and August 1920 which damaged both houses and crops in Cuttack, and to a lesser degree in Balasore, Sambalpur and Puri. More than 4½ lakhs of rupees were spent last year in relief measures in Orissa, and an additional sum of nearly 6 lakhs was distributed in loans for agricultural purposes. This year, although it was found necessary to spend a further sum of nearly a lakh in Puri and Cuttack on relief measures, economic conditions showed signs of rapid improvement in Orissa, owing to a bumper rice crop, followed by the favourable January rainfall already referred to. In the rest of the province there was no serious economic distress throughout the year except in the comparatively small area affected in September by the Saran floods. In this district a rainfall of between 16 and 20 inches which occurred on September 14th—15th, and which had been preceded by a week of heavy rainfall, caused widespread damage. Houses were destroyed wholesale, stored grain was damaged, the greater part of the rice crop was lost, and the late *bhadai* crop suffered severely. About half a lakh of rupees was spent on relief measures, and about 2 lakhs were allotted for loans for agricultural purposes and half a lakh for house-building loans.

In the rest of the province, the good harvest of 1919 followed by a bumper rice crop in Orissa in the cold weather of 1920 combined to produce a sensible effect on the price of foodstuffs. The price of common rice had fallen by one seer to the rupee in the last quarter of 1920 and stood in December at 6.94 seers. In the first quarter of 1921 it fell from 7.23 seers in January to 7.53 seers in March. From April to August, a period during which the price normally rises, it rose steadily from 7.14 to 5.78 seers; but from September it again fell from 6.11 in that month to 7.69 seers in

December. The price of maize showed similar fluctuations, declining from 9.83 to 10.55 seers to the rupee in the first four months, then gradually rising to 6.82 seers in August, and falling again by December to 10.75 seers.

Agriculture in Bihar and Orissa.

The economic importance of agriculture in Bihar and Orissa needs no emphasis. Over 90 per cent. of the population is directly or indirectly dependent on agriculture for its prosperity: there are few towns of any size in the province; its mineral resources, though unusually rich, are concentrated in a comparatively small area; lack of capital has retarded the development of industries on a large scale until recent years; and the great bulk of the population is, and is likely to continue to be, engaged in agriculture as its only means of livelihood. A further characteristic of Bihar and Orissa, as of India as a whole, is the predominance of the small peasant proprietor. The soil is divided and subdivided into small holdings, more often than not consisting of a few acres only, the produce from which is barely sufficient to support a single family. The prevalence of these uneconomic small holdings and the extreme poverty of the agricultural classes constitute the chief stumbling-block of the Agricultural Department. For many improvements such as motor tractors and expensive chemical manures which have revolutionized agriculture in Western countries, where farming is conducted on a large scale, are often useless to the Bihar raiyat, whose holding is too small for a motor plough, whose means are too limited for him to purchase expensive manures, and to whom the risk of purchasing even an unknown variety of seed will often seem too great to be worth while. Finally the illiteracy of the Indian peasant makes the task of propaganda unusually difficult and disheartening.

The prevalence of small holdings.

A second hindrance to the rapid discovery and application both of improved seeds and of improved manures in Bihar and Orissa lies in the wide divergency of soil and general agricultural conditions between one part of the province and another. A type of seed suitable for North may be unsuitable for South Bihar. Chota Nagpur and Orissa each have their own problems, particularly of soil and drainage. This fact renders impossible the concentration

of research and field testing in one area, and one of the reasons why comparatively little has yet been achieved by the Agricultural department in this province is that lack of funds and of staff has prevented the institution of central farms in the various representative tracts, which could each solve local problems, and could each test whether the solution of problems discovered elsewhere were suitable to the particular locality. There are at present central farms only in Sabour, Cuttack and Ranchi, and though Orissa has three and Chota Nagpur four minor farms representing smaller typical areas, there has hitherto been no farm suitable for the investigation of the problems of North or South Bihar or of the Ganges *diara*. Moreover Sabour itself, which was made the central agricultural institution and where a college and research laboratories were built before the separation of this province from Bengal, is unfortunately not typical of any large area.

The divergency of agricultural conditions.

But though Bihar, North and South, Chota Nagpur and Orissa differ very greatly from the agricultural point of view, the difference is chiefly one of degree. In Orissa indeed, there are tropical products like cocoanuts, and the ordinary agricultural crops, with the exception of rice, are not grown in large quantities, sugarcane, *bhadai* and *rabi* crops being far less important there than in Bihar. But rice is the most important, and sugarcane the most valuable general crop all over the province; and the growth of both is dependent on the proper use on the one hand, and on control, on the other, of the same essential climatic factor. This factor is the concentration of about four-fifths of the heavy rainfall—which amounts to some 40 to 80 inches—into a period of about a hundred days from the second week of June to the third week in September. After sugarcane and rice, maize (*makai*) is the most important single crop in the province; but of greater collective importance probably than any single crop except rice are oil seeds, pulses, *juar*, and smaller millets. Tobacco and chillies are of considerable importance in North Bihar.

The most important crops.

The province has no considerable port and the comparatively heavy charges for railway freight fall more lightly on the less bulky and more valuable commodities. The result is that the less valu-

able products are grown chiefly for local consumption. Cereals are in fact for the most part locally consumed, while the principal agricultural exports are the more valuable oil seeds and pulses and sugar. These pay for cotton cloth and yarn, which can be imported cheaply. This fact, and the fact that the climate is too wet for the extensive cultivation of any known variety of cotton under the system at present in vogue, accounts for the comparatively small area of cotton cultivation, which has declined still further with the improvement of railway communications. Experiments are now being made with a view to the discovery of improved types of cotton. But the future development of agriculture in the province seems to lie more in the direction of an increased production of pulses, oilseeds and sugar on the one hand, and of the insurance of the rice crop against the effects of the irregularities of the monsoon on the other. Owing to the peculiar soil and climatic conditions of the province, which render irrigation almost unnecessary in North Bihar, where the bulk of the *rabi* crop is grown, and to the fact that the supply of water in the rivers in the rest of the province is very low after October, upland crops are generally speaking grown without irrigation, which is mainly used for rice and sugarcane. It is therefore to these two crops that the Agricultural Department is devoting its particular attention.

and the reasons therefor.

A large number of varieties of sugarcane have been selected and tested at Sipaya, the provincial cane station, and local tests of superior varieties have been made on the farms. Owing to the departure of the Economic Botanist who was subsequently killed in the war, the all-important work of selection, hybridization and cross breeding has been gravely impeded, but sufficient progress has been made to enable the best varieties of Bihar sugarcane to be introduced largely into Orissa. The importance of drainage in increasing outturn has been demonstrated, and experiments in growing cane in low-lying land which had been previously drained have proved successful in the Kanke farm. As will be seen later in this chapter Bihar is one of the chief producers of white sugar in India and there are several sugar factories in North Bihar. A proposal has been made by the Department of

The work accomplished by the Agricultural Department.

Industries that government should now pioneer the industry in South Bihar by starting a small sugar factory there. The absence of a Botanist has also hindered progress in the production of the improved varieties of rice. But a great deal of spade work has been done, and various improved types of paddy, produced as the result of the investigations of the Bengal Agricultural Department, have been popularized in those parts of the province to which field testing has shown that they are suited. Apart from valuable information on crops such as sugarcane, oilseeds and pulses, which has been accummulated in the scientific sections at the Sabour College but which does not lend itself to popular exposition, the more important practical results of the Department's work have been the popularization of "Pusa No. 12" wheat, and the introduction of improved varieties of groundnut particularly in Patna and Orissa, the sale of *Kakya Bombai* jute seed in Purnea and of cotton in South Monghyr and the Santal Parganas. The investigation of manures has also made considerable progress. The beneficial effect of manuring, e.g., groundnuts with gypsum has been demonstrated, and in South Bhagalpur striking results have been produced from applying superphosphates to the paddy crop in combination with green manuring. The latter experiments incidentally illustrate the practical result of soil analysis, which is part of the functions of the Agricultural Chemist. An important experiment was successfully carried out this year in Cuttack to demonstrate the possibilities of growing *rabi* crops in Orissa in areas in which flood has destroyed the paddy.

Seed distribution.

Recent experience has led to a clearer appreciation of the more fundamental agricultural problems of the province indicated above, namely the use and control of the concentrated rainfall for the cultivation of rice and for the more intensive type of cultivation represented by sugarcane. It is significant that the best crops of rice in the province are commonly grown in Manbhum, where the soil is perhaps poorer than in any other district but where the area under the crop is small relatively to the catchment area; while on the whole very poor crops are grown in Shahabad where canal irrigation enables a very large acreage of rice to be grown in compact blocks on good

Drainage.

land. Still more significant is the fact that some of the heaviest crops of sugarcane in the province have been grown at Ranchi where the soil is poor and the season a short one, but where the drainage of the land on which the crop is to be grown is an essential preliminary to its cultivation. Again, the principle on which the remarkable indigenous system of irrigation by *pains* and *ahars* developed in the Patna and Gaya Districts is based, seems capable of almost indefinite extension to catchment areas throughout the southern part of the province, so as to secure and increase the paddy crop on a very much larger area than that on which it can now be grown without the risk of periodical famine. It also seems possible that the introduction of systematic field drainage, which is a comparatively recent feature of European agriculture, combined with the extensive use of subsoil water supplies, may effect a very great improvement both in the quantity and value of dry land crops.

There is still a great deal of work to be done before the various drainage problems which the province provides can be adequately tackled. There are not only engineering problems to investigate; but chemical and botanical investigations, including a soil survey, have to be completed in order to discover exactly what necessary qualities are missing in the soils and crops of the province and how these defects can remedied. Only then will it be possible to adapt the local crops and soils to a more intensive productive system. Hitherto progress has been arrested by shortage of staff. The place of the Economic Botanist, which fell vacant early in the war, is still unfilled, and an agricultural engineer was only appointed last year. But what promises to be an improvement of great economic advantage has been demonstrated on the Government farm at Kanke. By experimenting in the lay-out of the farm the present Director of Agriculture has shown that much better drainage can be secured by constructing narrow reservoirs along the slopes of the hills than by the usual practice of building a *bandh* across the valley head. A local zemindar has already adopted this method in one village, and steps are being taken to popularize the system.

As has been mentioned in Chapter II a vigorous attack was made in the Legislative Council against the Agricultural Department. Both in the Budget debates and in the Council's second session not only was the abolition of the Sabour College advocated, but the

expenditure of money on research work by experts was stigmatized as extravagance; the work of these experts was called unpractical; the fact that the superior staff has been mainly European was emphasized as a main cause of the alleged failure of the department, and there was a section in the Council which stoutly maintained that the Indian peasant had nothing to learn in the way of agriculture. An Agricultural Conference was held in July at Patna at which under the presidency of the Minister the whole field of the activities of the Department was discussed. and on the advice of the Minister an Advisory Board was constituted as a permanent body to give advice on agricultural matters. On the renewal of the attack subsequent to this Conference a further special committee was established containing one European and six Indian non-official members of Council, besides the Revenue Secretary and the Director of Agriculture, under the presidency of the Agricultural Adviser to the Government of India. The terms of reference to this committee included an examination of the whole organization and policy of the department, and an invitation for recommendations regarding such changes as may be considered necessary to increase its usefulness, and in particular regarding two questions of policy. The first is the location of the provincial sugar station. This is at present at Sipaya, which is also used as will be seen later in this chapter, as a cattle-breeding station. The Indian Sugar Committee, in their recently published report, raised the question of the suitability of the present site, which they criticized mainly for geographical reasons. The second particular question referred to the Agricultural Committee was that on the future of the Sabour Agricultural College.

The attack on the Agricultural Department in the Council.

As the criticisms levelled against the department in Council, and the whole question of the suitability of the present organization of the department, have been referred to a special committee, it would be out of place to discuss them in this report. The history of the department may, however, be briefly summarized.

When Bihar and Orissa was separated from Bengal in 1912 an Agricultural Department had been in existence for some 8 years, but until 1907, when the Sabour College was founded, there had been no technical officers of gazetted rank stationed in this province. The scientific staff which was then appointed consisted of a Botanist,

a Chemist and a Professor of Agriculture, with Assistant Professors. But their utility was undoubtedly hampered by their inexperience of local conditions, which rendered their teaching more theoretical than practical, and by the site selected as their headquarters, which, as has been mentioned already, is not typical of any large area in the province.

The history of the Department

The separation from Bengal in 1912 deprived Bihar and Orissa of the services of a Deputy Director who had acquired some knowledge of the province, and the war removed the Botanist, Professor of Agriculture and Deputy Director, Patna, and was indirectly responsible for the loan of the Orissa Deputy Director to Kapurthala. When therefore in 1919 the only remaining Deputy Director was appointed to officiate as Director of Agriculture the Department's work had been very seriously interrupted, and a complete reorganization was necessary. A scheme for the continuous investigation of local problems on farms chosen to represent typical agricultural tracts was drawn up, which provided for sub-farms on smaller tracts, for the training of a subordinate staff to manage the smaller farms, and for practical demonstration by trained farm labourers (*kamdars*). An agricultural engineer and three new Deputy Directors were appointed in 1920. The future of Sabour College was discussed, and while it was realized that either its abolition as a teaching institution or the complete reorganization of its curriculum would be necessary, it was considered advisable to postpone a final decision till the wishes of the Reformed Legislative Council could be ascertained.

Financial stringency made it impossible to give immediate effect to the new farm schemes. Land has however been acquired this year for a central farm at Gaya, and acquisition proceedings have been in progress for smaller farms at Jamui and Nawada. The laying out of three small farms at Khurda, Balia and Sambalpur has been completed, and sites for other farms have been provisionally selected. Finally the pay of the Indian, the Bihar and Orissa and the Subordinate Agricultural Services has been revised this year, and the Subordinate service has been further reorganized with separate time-scales for its various branches.

The cultivators of this province are daily faced not only with the familiar economic problems of agriculture proper, the manuring

of their fields, the purchase or selection of the best seed and the production and marketing of the most profitable crops, but also with the manifold problems of their cattle. On the quality and health of his ploughmen depends to a great extent the agricultural prosperity of the cultivator; and the economic importance of cattle in Bihar and Orissa extends far beyond the sphere of local agriculture. In the first place in a country where the bullock cart is and will remain the main means of transport it is the natural object of the cultivator, particularly when the soil he cultivates is light and easily worked, to dispose of his young stock at the high price he can command, while retaining the inferior cattle for the own cultivation. Secondly, owing to the exceptional breeding and grazing grounds available in this province, particularly in Bihar proper, and the proximity of areas in neighbouring provinces where there are less favourable facilities and at the same time growing industries dependent on a regular supply of cattle, a huge export trade has developed The tea industry in the Duars, Darjeeling and Assam, the jute industry in Eastern Bengal, the demand for milk and cattle in Calcutta, and finally the increasing demand for cattle outside India, from the Argentine, Brazil, the United States, the West Indies, the Philippines, Java, the Malay States and East Africa, have all contributed to make this province a huge cattle market.

The Veterinary Department.

The economic importance of cattle in Bihar and Orissa.

A few statistics will illustrate this point forcibly. A list of principal cattle markets and fairs compiled in 1913-14 showed no fewer than 55 annual fairs with an average number of 401,000 cattle brought for sale and over 100 markets held either once or twice a week throughout the province, while in the 1920 Sonpur fair alone there were over 48,000 stock present. The export of cattle by rail which amounted in 1901 to about 34,000 cattle rose in 1913 to 121,000 and the annual average for the period 1918-21 has been 101,000. These figures exclude sheep and goats of which an average of over 300,000 have been exported annually in the last 8 years. Finally the last cattle census of 1920 showed a total cattle population of more than 24 millions, including 3,700,000 bulls and

Cattle markets and export trade

bullocks, 3,100,000 cows, 220,000 male and 1,100,000 female buffaloes, and 3,300,000 young stock, besides sheep and goats. The effect of the huge demand for cattle on prices may be seen by the fact that at Sonpur fair in 1920 bullocks were fetching from Rs. 100 to Rs. 200, cows from Rs. 110 to Rs. 280, and buffaloes from Rs. 115 to Rs. 325 each. Thirdly the value of ghi for home consumption and export, and the increasing importance of the problem of the milk supply, (less urgent in in Bihar than elsewhere owing to the absence of large towns) gives both cows and buffaloes an additional economic value. Enquiries made in 1914 showed that as much as 8,500 maunds of ghi were exported in that year by two Chapra dealers alone, and statistics compiled in 1912-13 showed that while imports of ghi into the province increased between 1901 and 1913 from 9,000 to 18,000 maunds, exports increased from 4,000 to 89,000 maunds. The chief breeding and grazing grounds in the province are along the Ganges, Gogra, Gandak, Sone and Kosi rivers, in the Kaimur hills and in the jungles of north Champaran along the Nepal border. Neither Orissa nor Chota Nagpur possesses such facilities as Bihar proper, and this is reflected both in the comparative scarcity of fairs and markets and the smaller export trade, and in the inferior type of cattle in those parts of the province.

The Ghi and milk supply.

Principal grazing grounds.

The two chief problems connected with cattle are first breeding, the production of the healthiest and most useful types both for draught and milking purposes, and secondly the prevention and cure of disease. Towards the solution of the second problem little or nothing had been done before the introduction of veterinary science by Government, the result of which will be described later. But the problem of producing improved types of cattle has proved much more difficult, and breeding is still in the main dependent on the ancient and indigenous system of the dedication and release of Brahmini bulls by Hindus on the death of their relatives. The deterioration in the quality of these bulls is common knowledge. This is partly due to the imitation by the poorer classes of the practice of their superiors in station, with the result that an increasing number of cheap animals are released every year. This again has had its influence

Veterinary problems.

on richer men, who are now satisfied with the cheaper type which is good enough for their poorer brethren. It is partly due to the increase in the price of cattle, partly also to the preference for bulls of a white colour, irrespective of their merits, and partly to the decreased sanctity of the Brahmini bull. Since the establishment of the Veterinary Department in Bengal in 1892 various attempts have been made to remedy this deterioration. Stud bulls were supplied to local bodies and wards estates, and at first it was sought to meet the demand by securing the best specimen of Brahmini bull. This proved a failure. The introduction of fresh blood from foreign Australian stock was then tried and failed. Efforts have subsequently been directed to the production of an improved indigenous breed. A farm at Pusa was started and another at Siripur, and experiments made with crossing indigenous cows with Montgomeries from the Punjab. Then in 1911 the *desi* herd was removed from Pusa to Bettiah, where the Bettiah Raj now runs the farm under the general superintendence of the Veterinary Department. The herd consisted in 1920-21 of 1 stud bull, 49 bull calves, 54 cow calves and 10 buffalo bulls. On the abolition of the Siripur farm, after the release of the Hathwa estate from the Court of Wards, a Government farm was started in Sipaya in 1913-14, which now has a herd of 319 animals. This farm has succeeded in producing a well developed type of bull, for which a certain demand exists in Shahabad and elsewhere. Sixty-one bulls have been supplied in three years, 28 of which have been sent to Shahabad. But the growing importance of the milk problem has now emphasized the necessity of evolving a breed which will combine as great a capacity for milking in the cows as is to be found in any Indian breed with the maximum of utility of the bullocks for draught purposes. The Sipaya herd has not yet solved this problem. But progress has been made with a herd attached to the farm at Kanke in the production of a good milking strain. A market for milk has been found in the neighbouring Kanke asylum, and a successful dairy farm is now working. Various proposals were made by the Department in 1920 for the development of cattle-breeding operations, and the problem is now being tackled by the Agricultural Committee appointed on the recommendation of the Legislative

Cattle-breeding.

The Kanke dairy herd.

Council. Though the positive results of experiments in cattle-breeding in this province have hitherto been comparatively small, it would be a mistake to depreciate the value which attaches even to the negative results of past failures. The evolution of an improved breed of cattle, as of improved types of seed, entails not only considerable time, but also the preliminary rejection of many unsuccessful lines of experiment.

In the prevention and cure of cattle diseases the Veterinary Department is performing a task in which the difficulties are due rather to lack of staff and organization than to lack of knowledge. The havoc which cattle epidemics, of which the chief are rinderpest, hæmorrhagic septicæmia, anthrax, black quarter and foot and mouth disease, cause in this province is enormous. It is estimated that in the five years between 1916 and 1920, over one hundred and ten thousand cattle died from epidemic diseases, while from April 1st to December 21st, this year, nearly 18,000 animals are reported to have died, and over 52,300 to have been attacked, including over 11,000 attacks from foot and mouth disease alone. Allowing for inaccuracies and exaggeration in the reports of chaukidars on which these figures are based, the total annual loss from preventible epidemic diseases cannot be placed lower than 20,000 cattle, representing a loss of at least six lakhs of rupees a year to their owners.

Cattle diseases. Their economic importance

Owing to the activities of the Veterinary staff, out of the total of nearly 20,000 outbreaks of epidemics reported to them in this five years' period, over half of the outbreaks were attended; in nearly 13,400 outbreaks over 478,000 animals were inoculated of which about 1,650 only died, owing either to injection of the serum during the incipient stages of the disease, insufficient doses or similar causes. From the 1st April 1920 to the 31st March 1921, over 92,000 cattle were protected against different contagious diseases, and out of some 3,184 outbreaks in the last nine months of 1921, no fewer than 2,080 were attended, and some 65,800 cattle were inoculated. Of cattle that are unprotected about one in every two attacked dies. It may be taken as certain that practically all the animals inoculated were exposed to infection, since otherwise their owners would not as a rule have

The benefits of inoculation.

sought inoculation. In fact it is obvious that, but for the work of inoculation in checking epidemics, a much larger number of cattle would have been exposed to infection. Hence we may ascribe to the efforts of the Department the saving of at least one lakh of animals a year by inoculation, and through them the saving of a vast number more which would otherwise have been involved in the spread of the epidemics. Some interesting and successful experiments have also been made at the Pusa and Kanke farms this year with the "serum simultaneous" method of inoculation, which is believed to confer permanent immunity against rinderpest, and thus to render repeated inoculations on the outbreak of fresh epidemics unnecessary.

The method at present adopted for dealing with epidemics is as follows. The village chaukidar informs the nearest police station of the outbreak, and the police officer reports to the nearest Veterinary Assistant Surgeon. The latter has standing instructions to visit thanas frequently particularly on chaukidari parade days. He obtains sera and vaccines from stores kept in Patna, Ranchi and Cuttack, which are all supplied from Muktesar. These are sold to local bodies, to the Feudatory States, and to such private bodies as employ Veterinary Officers, at prescribed rates. Sera and vaccines to the value of nearly Rs. 45,000 have been dealt with in the last nine months of 1921; and about Rs. 4,000 has been realized from local bodies. It is satisfactory to note that inoculation is rapidly growing in popularity. Up till very recently apathy, and in many cases religious scruples, gravely hindered progress. The emphatic pronouncement in favour of inoculation and of general medical treatment of cattle made by a body of pandits of Puri and Darbhanga in 1913 did a great deal to remove such misunderstandings, and vernacular translations of the pamphlet embodying this pronouncement have been distributed widely throughout the province.

Epidemic relief.

Besides inoculation work for the prevention of epidemics great progress has been made in the treatment of general diseases and injuries of animals. There are now 24 veterinary hospitals with accommodation for in and out-door patients, and 59 dispensaries for out-door patients, the former in charge of stationary and the latter of itinerant Assistant Surgeons,

Treatment for general diseases and injuries.

All these officers are lent to local bodies, Government meeting half the pay and allowances of itinerant and one-sixth of those of stationary officers, while the local bodies supply the balance. If more than one of each class of officer is employed in any subdivision the local body bears the whole cost. Three new hospitals subsidized by Government are at present under construction at Bargarh, Dumka and Chaibassa. In the five years from 1915 to 1920 over two hundred and ninety-four thousand patients were treated by itinerant, and over four hundred and sixty-two thousand by stationary, officers. In the last nine months of 1921 over 16,500 were treated at hospitals and nearly 22,300 by touring officers. Model rules issued by Government are being gradually adopted by local bodies regulating the rates of fees charged and the extent to which private practice is allowed.

The prevention of cruelty to animals.

In the prevention of cruelty to animals an important part is played by the Veterinary Department, whose officers are responsible for initiating most of the prosecutions undertaken in the courts. An inspection by the Superintendent of several municipalities directed towards the suggestion of improvements in the hackney carriage service was carried out in 1917-18, and the recommendations made were laid before Government in connection with the proposed amendment of the Municipal Act which was being considered by the Legislative Council at the end of the year under review. Mention must also be made of a pamphlet recently prepared by the present Assistant Director on the subject of inhumane and illegal methods of slaughtering goats. Government have long been aware of the prevalence of this malpractice particularly in some parts of Tirhut, and prosecutions under the Act which has been extended to all parts of the province have been undertaken whenever cases were brought to the notice of magistrates by Veterinary officers or by the police. But such cases often failed in the courts owing to the difficulty of distinguishing the skins of goats killed in a humane manner. The publication, which is likely to take place shortly, of the new pamphlet, which is accompanied by explanatory photographs and diagrams, should be of the greatest use both to Veterinary and to Judicial officers.

Attention has already been called in the chapter on the Council to the debates which took place this year on Veterinary matters,

One resolution for the opening of a central veterinary school was carried, and another for increasing the number of hospitals and dispensaries was only withdrawn in view of Government's explanation of the practical necessity and wisdom of leaving development of this form of relief to local bodies, with occasional subsidies for capital expenditure by Government and with the contributions already given towards the pay of Veterinary officers. There was an attempt made during the voting on the budget to reduce the provision for the subordinate Veterinary staff. But it did not find support and the motion was lost. The only negative action taken was the refusal to vote the grant for an office, residence and laboratory for the Deputy Director at Muzaffarpur. At present the microscopical diagnosis of three of the principal epidemic diseases, anthrax, black quarter and hæmorrhagic septicæmia, and of several minor diseases is carried out in the laboratory attached to the Director's office at Patna. The importance of this work and its practical utility needs no emphasis. Without prompt diagnosis by this means treatment would be mere guess-work. The laboratory at Muzaffarpur was intended to enable further progress to be made in the systematic investigation of animal diseases and their remedies.

Support given to the Department in the Council.

But the task of the Veterinary Department has been hitherto gravely hampered by lack of an adequate staff. The multifarious duties of the Director have been recently rendered more manageable by the appointment of a second Imperial Service Officer in March 1920 and of a third in September 1921, who is still under training. With the appointment of these two officer there will eventually be a Deputy Director for the North Bihar and for the Orissa ranges respectively, and a Director who will ordinarily be the Veterinary Adviser to Government for the whole province and will also act as Deputy Director for the central range of South Bihar and Chota Nagpur. The construction of permanent buildings for the headquarters at Muzaffarpur of the North Bihar tract has been postponed by the Council. But an office has been opened in a hired house, with effect from November 1st, 1921. Three posts for the Provincial Service have been sanctioned by the Secretary of State, of which one was filled in February 1919 and another was filled as

Staff and administration.

an experimental measure in April 1921. Ten permanent appointments of Veterinary Inspectors have been made out of twelve sanctioned posts; and out of a sanctioned staff of 62 touring and 62 stationary Veterinary Assistant Surgeons, (*i.e.*, two for each subdivision) up to date only 85 posts of Veterinary Assistant Surgeons have been filled, with three staff and four Reserve Officers. When the province was first constituted in 1912, there were only 56 Assistant Surgeons in all, and even now the charge of one Assistant Surgeon extends in some cases to as much as one to two thousand square miles. In these circumstances it is less a matter for surprise that progress in the prevention and cure of epidemic and other diseases has been slow than a matter for congratulation that so much good work has been done. The pay of all the subordinate staff has however been recently raised, and, if only local bodies evince a desire for the development of veterinary work and can find the funds, the prospects for the future will be bright.

One of the causes which has hitherto rendered the service unpopular, besides its scanty pay, has been the necessity to go to Calcutta for admission to the Bengal Veterinary College at Belgachia for training. For this purpose stipends are granted by local bodies, and by Government in the case of the aboriginals of Chota Nagpur and the Santal Parganas and in special cases of inhabitants of Orissa.

Veterinary training.

The value of the Government stipends was raised in October from Rs. 15 to Rs. 20 a month. In 1912 only 28 students from this province were on the roll of the college. This increased to 57 in 1919-20, but fell to 46 this year of whom 12 were subsequently excluded owing to sickness, failure to pass examinations, etc. If the recently constituted Advisory Board are able to find a practical means of carrying out the Council's recommendation for a provincial college the popularity of the Veterinary Department may be expected to increase considerably. Finally the introduction this year of two departmental examinations for the subordinate staff as a preliminary to promotions will, it is hoped, increase the efficiency of the staff by keeping their professional knowledge up to date. A scheme for training compounders for work in hospitals and dispensaries is also under consideration.

The problems of irrigation and drainage are intimately connected with the other problems of the land which have been classed under

Agriculture at the beginning of this Chapter and the canal systems of Bihar and Orissa not only serve the purpose of irrigating the cultivator's fields but they also in some cases protect large tracts from floods and the resultant famine. A third purpose served is that of navigation. The four major canal systems in this province are divided into two classes. The Son and Orissa canals are called productive, because it was originally hoped that they would produce revenues which would pay for the interest on capital expenditure. The Tribeni and Dhaka canals are called protective, as one of their main functions is to protect certain tracts of country from famine.

The Bihar and Orissa canal systems.

Government took over the Orissa canals from the East Indian Irrigation Company in the late fifties of the last century, as the Company had got into difficulties. The system was originally intended to connect Cuttack with Calcutta. The Son Canals were taken up a few years later by Government, and were intended to connect Monghyr with Mirzapur. Both systems were intended to combine irrigation with navigation. But the opening of new railways has destroyed all hopes which may have been entertained of making either system a paying concern from the point of view of navigation. The navigation receipts from the Son Canals have averaged only Rs. 22,140 for the last three years, and receipts from the Orissa canals have fallen from Rs. 90,000 in 1901-02 to about 60,000 this year.

The decline of navigation.

The position has for long become sufficiently serious for Government to consider the abandonment of the Orissa Coast Canal, which has been worked at a loss of some Rs. 20,000 a year in recent years. The subject was brought before the public this year in Council, when a motion was only lost by one vote for the refusal of the total budget grant for this canal. It provides, however, a possible inland route from Cuttack to Calcutta: the abandonment of one portion in Balasore would leave the connecting Bengal canal system dry: it affords a means of access to parts of this province which would otherwise be inaccessible during a large part of the year: it acts as a useful drain: and an average of some 4,000 boats a year still use the canal. It has therefore been decided recently, after a full

The Orissa Coast Canal.

inspection and enquiry by the Member of the Executive Council in charge, to continue to maintain it for the present.

There is however another side to the picture, as both the Orissa and the Son canals perform valuable functions as irrigation systems. The Orissa canals irrigate annually an average of well over a quarter of a million and the Son canals of over half a million acres. The Orissa canals were worked at a loss in 1920-21 owing largely to the high cost of repairs to damage done by the abnormal floods of 1920. But the revenue from the Son canals amounted to about 4.5 per cent. on capital outlay, which is more than sufficient to cover the interest charges; and the economic gain to the cultivating classes within the area irrigated is enormous. Although the water-rates charged in Orissa have been gradually raised in recent years, the average rate charged works out at only about 3 per cent. of the value of the crop, and as an insurance the present value of the water is at the present time probably at least Rs. 8 per acre. With an average annual area irrigated of 280,000 acres, the insurance value of the water works out at Rs. 22,40,000. Nor is this the only economic gain produced by the Orissa canals. An area of half a million acres is protected from flood by the canal embankments. Taking the average outturn of cleaned rice per acre at 12 maunds and the value of rice at Rs. 4-8-0 per maund the value of the crops saved from flood may be estimated at 26 lakhs of rupees. As the water-rates assessed at present are only about 5 lakhs of rupees the Orissa canal system is not such a drain on the wealth of the province as it at first sight appears. Moreover the average incidence of the water rate, both in the Orissa and Son canal systems, is much lower than elsewhere. In India the average incidence is 10 per cent. in Egypt 12½ per cent. and in America 16 per cent. of the value of the crop. In the Son area it is only Rs. 3-8-0 for long term and Rs. 4-8-0 for season leases, while the average value of the rice crop per acre, taking Rs. 5 as the value of the rice per maund and 13 maunds as the average outturn, works out at Rs. 65 per acre, to which something must be added for the value of the straw and chaff. The rates at present charged may therefore safely be taken as still considerably below the economic value of the water.

The economic benefits of irrigation from the Son and Orissa Canals.

The two main protective canal systems are the Tribeni and Dhaka canals. The Dhaka canal, of which the construction was

begun subsequent to the famine of 1897, and which was opened in 1908, irrigates an average area of some 10,000 acres. The Tribeni canal which is 61 miles in length crosses all the drainages of the district of Champaran. It cost nearly 80½ lakhs and has been in use since 1911-12. Though the canal is unlikely to pay much interest on capital, it renders some 400 square miles of highly cultivated land safe from famine, and the water from it is fully utilized. The chief problem of the future is to ensure a regular supply of water in October during the shortage of rain usual at that season, and the question of the practicability of constructing a rubble barrage at its head is now being investigated.

The Tribeni and Dhaka canals.

Though a large number of council questions were asked about canal matters, the only resolution moved was for the opening to the public of canal service roads. Government accepted the resolution so far as light traffic was concerned, but pointed out that before roads could be opened to cart traffic considerable expenditure, which would be probably out of proportion to the benefit conferred, would have to be incurred. Government therefore stipulated that District Boards should meet the cost. District Boards have subsequently been addressed in the matter, and in the meantime service roads are open to light traffic.

The Council resolution about canal service roads.

The year 1921 was comparatively uneventful from the point of view of irrigation. The effect of the failure of the 1920 monsoon on the *rabi* crops in Bihar was reflected in the large area (139,272 acres) of *rabi* irrigated from the Son canals. The dry weather between the middle of September 1920 and the end of May this year diminished the supply of water available in the Son, and thus made it impossible to irrigate the sugarcane crop adequately. A drought in July and August in Bihar accompanied by heavy rain in Chota Nagpur and the Central Provinces made it difficult to admit sufficient water into the Son canals for purposes of irrigation without choking the channels with flood silt; but owing to the break of the drought in the middle of August the irrigated Son rice crop was almost normal. In Orissa there was a bumper crop; and in North

Irrigation in 1921.

Bihar irrigation was attended by no difficulties, as the Gandak is a snow fed river. In order to minimize wastage the construction of proper village channels was insisted on in Champaran this year before even a season lease was granted.

In three districts rainfall was abnormal. In Ranchi it rose from a normal of 47.29 to 66.24 inches, rain falling steadily from early June till the middle of October. In Shahabad there was an excess of 39.19 inches at Arrah; and in Saran an extraordinary fall of rain on the night of September the 14th occurred over the whole district. Over twenty inches was recorded at Siwan, and the rain gauge at Chapra was flooded in one night. Probably 16 to 18 inches of rain fell. This rainfall caused a sudden flood which did considerable damage. A further reference to it is made in Chapter VI. The flood was partly aggravated by the blocking of the drainage by a portion of the Mashrak branch railway line.

There is no space this year to deal with the difficult questions connected with embankments in this province. The problem is confined chiefly to the two Orissa coast districts of Cuttack and Balasore, but it also arises in North Bihar. Embankments in Orissa are either agricultural embankments taken over by Government at the time of the Permanent Settlement in 1816 or flood embankments constructed in connection with the Orissa canals; and the crux of the problem in Orissa is how to regulate the periodic spill from the Orissa rivers, due to the diminishing fall in the land level which takes place between the hills and the sea. It is when the velocity of the flood is high that damage is done, as sand is then deposited, in addition to the fertile silt distributed by lower floods. The high floods of 1920 brought this problem into prominence, and a detailed embankment and drainage survey is now being made, which will be completed in June 1922. It will then be possible to examine the question thoroughly. In North Bihar there are two main classes of embankments, those declared to be public under the provisions of the Embankment Act and maintained by Government at the cost of the owners of the protected area, and secondly private embankments. The construction of new embankments throughout the whole area is prohibited under the Act. The maintenance of the public embankments is paid for by a fixed charge

Embankment problems.

levied for twenty years. This is known as the contract system. These embankments are efficient and are proof against the highest floods. The difficulties experienced in controlling minor irrigation schemes in South Bihar led to the appointment of a committee on the recommendation of the Legislative Council this year; and two Bills, one for private irrigation and the other for minor irrigation works, have been drawn up. The sanction of the Government of India will however be necessary before they are introduced.

Though Bihar and Orissa is primarily an argicultural province it so happens that in the Chota Nagpur Division it contains one of the most important industrial areas in India, and the newly created Department of Industries is faced with economic problems which are among the most interesting and the most difficult of those included in the portfolio of the Ministers. It was only in April 1920 that the Department was created in accordance with the recommendations of the report of the Industrial Commission. The scope of its activities is capable of wide extension but may be divided under two main heads, Educational and Industrial. Under the second head it comprises not only the direct encouragement of industries, including research work, the provision of technical advice and the grant of loans to small industries, but also the collection and distribution of commercial and industrial intelligence, the organization of industrial exhibitions and museums, the conduct of industrial surveys and the purchase of Government stores. Under the first head is included the control of technical and industrial education.

The Department of Industries. Its scope.

The staff consists at present of a Director, with a Personal Assistant, a Deputy Director who is an electrical and mechanical engineer, a Chemical Adviser, who is also a professor of chemistry in the Patna College, a Textile Expert, an Inspector of Technical Schools, who is also Principal of the Bihar School of Engineering, and an Inspector of Factories appointed in June 1921. There is a Board of Industries consisting of the Director as Chairman, a representative of the metallurgical industries, two representatives of the coalfields, one of the Railways and five of indigenous industrial interests. The Director of Public Instruction, the Conservator of Forests, the Director of Agriculture and the Registrar, Co-operative Societies are

Its staff.

ex-officio members who attend for the discussion of matters affecting their particular departments.

Industrial Education.

The lack of skilled labour is one of the chief obstacles to the development of industries, and the education of the more or less illiterate industrial population as well as the diversion of the youths of the educated classes into the fields of industry and commerce is no less important than the direct development of industries. As the Director has pointed out in his first annual report, the existence of a huge and ignorant industrial population may well prove a menace to the social system under modern conditions, while it is reasonable to hope that education will reveal among these same masses men of ability and character as fit to become leaders of industry as many of the upper classes.

Government schools.

The Province is handicapped in its facilities for industrial training by the absence of industries in its chief centres. There are, however, four Government schools and seven Government aided schools. The Bihar School of Engineering, Patna, turns out Civil Engineering subordinates, five candidates passing the Overseer examination this year. The number of applications for admission was 352, and the number of Bihari candidates was greater than the available vacancies. Its artizan classes produce a few carpenters, blacksmiths, fitters, masons and motor mechanics. The report of a committee appointed to consider the question of raising this school to the status of a college has been laid before Government. A scheme for an Orissa school of engineering at Cuttack has been sanctioned. This school will train sub-overseers. In Ranchi there is an industrial school where instruction is given in blacksmithy, carpentry, fitting and turning and motor mechanics, chiefly to Christian aborigines. A boot-making class has recently been started there. In Angul the Phulbani Industrial School teaches the Khonds weaving, blacksmithy and carpentry. The following work is taught in aided schools;—carpentry and cabinet work, fitting and turning in the American Baptist Mission School at Balasore ; carpentry in the mission schools at Chaibassa and Murhu in Chota Nagpur, carpentry and blacksmithy in the Bettiah Catholic Mission School, mechanical drawing and mathe-

Government Aided Schools.

matics in the Perin Memorial Technical School for employés of the Tata Works at Jamshedpur; and training for the railway coal-mines and workshops in the Beniadih School at Giridih. Of these aided schools that of Balasore is by far the best. Rs. 74,000 have been spent on machinery and buildings of which Government have contributed Rs. 28,500, and the school has a modern wood-working plant. To supplement these institutions an important scheme is under preparation for a School of Mines and Geology at Dhanbad, to be administered by the Government of India, but with this province represented on the governing body. A scheme for the re-organization of the evening mining classes, to enable men working in the mines to secure a second-class manager's certificate, has recently been introduced; an aided metallurgical school which aims at substituting trained local labour on the blast and steel furnaces for important labour, and at training a few men for higher posts was opened on November 1st 1920, at Jamshedpur. The school is administered by the Tata Iron and Steel Company. At the East Indian Railway Company's Workshops at Jamalpur, though a new institute has not yet been sanctioned, a number of special grade and first grade bound apprentices have been appointed to receive a long course of practical and theoretical instruction in mechanical and electrical engineering, in locomotive construction and in permanent-way maintenance. Buildings have also been purchased in Muzaffarpur with a view to the establishment of a Technical and Industrial Institute for Tirhut, and a committee has been appointed to consider the project. Finally proposals have been made for a School of Arts and Crafts and for a sale depot for village industries at Patna.

Technical Scholarships.

Proposals have been laid before Government for the award of two technical State scholarships annually for this province. Five such scholarships have been awarded since 1912, the holders of two of which are now drawing good salaries in business in India, while two more have just returned from their training in England. A feature of the new proposals is that in view of the great facilities now available for training in India, candidates should not be sent outside India, except when training in India is impossible, and a sum has been set aside for the award of scholarships and stipends for those who go to other provinces for technical education and training.

There is a prevalent impression, which was voiced in a Council question in the first session, that this province was in the past the home of many flourishing industries which have now become extinct. There is no doubt some truth in this belief. Artistic industries, such as silk and embroidery weaving, carpet-making, metal-chasing and engraving held in ancient times a position in Bihar to which they can no longer lay a claim. But their decline is probably due almost as much to competition from other parts of India to which improved communications have given greater commercial prominence as to the import of manufactured goods. To the growth of competition and to natural causes must also be ascribed, as will be seen below, the decline of the salt manufacturing industry in Orissa. Foreign competition is responsible for the decline of the indigo industry. The handloom industry, which was probably the chief local industry at the end of the eighteenth century, though it has yielded place largely to power mills in other parts of India, still holds its own and has lately taken a new lease of life.

Industrial development.

Iron smelting by primitive methods has been replaced by the huge modern iron and steel furnaces of Jamshedpur and elsewhere which employ far more persons than ever were engaged in ancient times, while since the close of the eighteenth century many new industries have been introduced which give promise of a great industrial future. In Bihar proper and in Orissa development is less marked than in Chota Nagpur. But even in Bihar, the the East Indian Railway shops at Jamalpur employ over 10,000 men; there are thirty small oil mills, chiefly along the Ganges, the Peninsular Tobacco Company at Monghyr, a large tannery neary completed at Motihari, lime works and a huge cement work under erection near Dehri, several sugar mills and indigo factories, and a few engineering works. In Orissa are two tanneries at Cuttack, and mineral resources in the Native States, which are now being exploited. In Chota Nagpur on the other hand are vast deposits of coal, iron and other minerals, and in the Jamshedpur area are the beginnings of what may prove the biggest metallurgical industry of the East. Here factories for the production of steel plates, tin plates, enamelled ironware, steel wire, jute machinery and agricultural

The principal provincial industries.

In Orissa

and in Chota Nagpur.

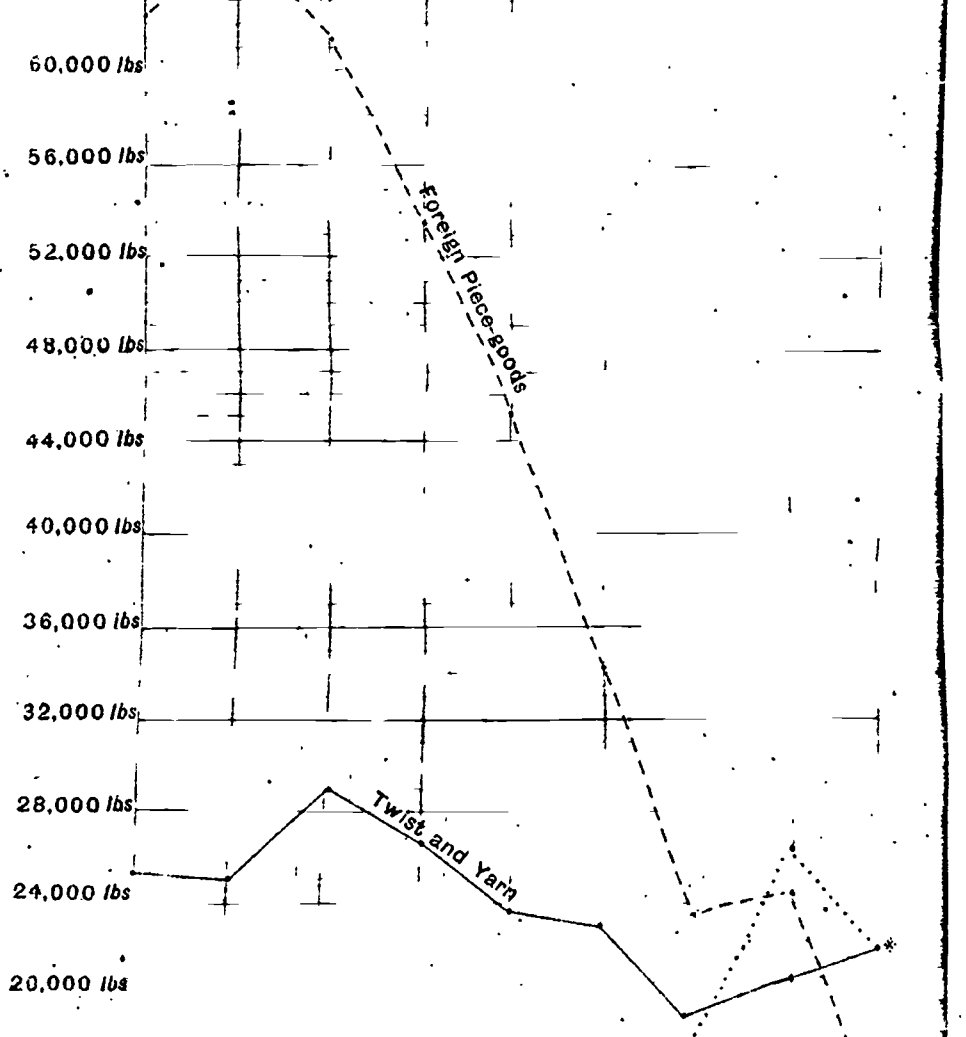
implements have been or are being erected. Nearly two-thirds of the coal raised in India come from the Jharia, Ramgarh, Bokaro and Giridih coal-fields, and other new fields are being open up. The quarrying of coal, iron, limestone, slate, china-clay, mica, chromite, manganese and copper, the manufacture and the production of fire-bricks, micanite, metallic copper, tar, ammonium sulphate, ochre and buttons are all new industries which are being carried on within this province. Finally the province produces rather more than half India's total outturn of stick-lac, of which a large proportion is worked up into the finished products, shellac or button lac, within the province.

The chief object of the department in the sphere of Industrial Development is to assist that development by means of Indians. The larger firms will necessarily be left more or less to look after themselves, and the department will concentrate on assisting the small capitalists. There is much special work to be done before such assistance can be organized, and this will be done by the Bureau of Industrial and Commercial Intelligence and of Labour, which will collect and tabulate information about raw materials and existing industries, and will deal with general statistics, *e.g.* of prices, mineral output, railway and river-borne trade, etc. It will also keep an up-to-date library, the nucleus of which has already been formed this year. An instance of the interesting results which can be gained by the collection of information is provided by the statistics obtained at the recent census, regarding the hand-loom industry.

The Bureau of Industrial and Commercial Intelligence.

These statistics show that there are no less than 129,270 hand-looms at work in the province, excluding the Feudatory States, which add another 34,000 to the total. The industry is most active in the Santal Parganas (18,800 looms), and Cuttack, Sambalpur, Ranchi, Manbhum and Gaya follow next in order of importance. Bhagalpur contains about 2,000 silk weaving looms, while Gaya and Shahabad are the chief producers of woollen goods. Among other interesting points revealed by these statistics may be mentioned the great increase since the creation of the province in the consumption of Indian-made piece-goods imported into the province at the expense of the foreign article.

The hand-loom industry.


60,000 lbs
56,000 lbs
52,000 lbs
48,000 lbs
44,000 lbs
40,000 lbs
36,000 lbs
32,000 lbs
28,000 lbs
24,000 lbs
20,000 lbs
Foreign Piece-Goods
Twist and Yarn

In Bihar proper, for instance, the proportion was 17.1 in favour of foreign goods in 1912-13, but in 1919-20, Indian-made goods were actually ahead of foreign goods. In the province as a whole, the consumption of foreign goods in 1912-13 was 62 million pounds foreign against 6 million pounds Indian, and in 1919-20, 24 million foreign and 26 million Indian. From April to September 1920, the consumption of hand-woven goods was nearly three-eighths of the total.

What Government have done for this industry.

Government have not been blind to the importance of encouraging this industry. Before the creation of this province, there were a few stationary schools under the supervision of the Serampur Institute. After 1912, the system of peripatetic parties was introduced by the present Director of Industries, when he was in charge of the Co-operative Department, and since 1915 four such demonstration parties have been started in Ranchi, Darbhanga, Sambalpur and Cuttack to supplement the stationary school at Bihar Sharif. With the assistance of a textile expert, over 1,000 fly-shuttle looms have been introduced in the Madhubani subdivision, some dobbies in Orissa and about fifty sleys each in Cuttack and Sambalpur respectively. The fly-shuttle sley increases the outturn of each weaver by 50 to 100 per cent. and the comparatively slow progress made in its popularization has been chiefly due to mistakes made before a textile expert was appointed, and the lack of proper organization. With the organization which is now at the command of the new department and the popular movement in favour of hand-woven cloth, great progress may, therefore, be made in supplying the demand for cloth in this province. Proposals have been already made for the organization of new demonstration parties, while a silk institute has been sanctioned to develope the silk industry at Bhagalpur. An experimental station to deal with problems connected with the cotton weaving industry is also being opened at Ranchi. We have already noticed in dealing with the Agricultural Department that the development of suitable kinds of cotton is one of the problems with which the Director of Agriculture is dealing, and mention is made later in this chapter of the work done by the Co-operative Department to help the weaving industry.

Finally, an All-India Hand-Weaving Exhibition was held in Patna, from November 28th till December 3rd, in order to show

the public what is being done to encourage and develope the hand-loom industry in every part of India, and to exhibit to the public the best examples of the different kinds of cotton, woollen and silk cloth now produced in India. Exhibits were shown in separate *pandals* from Bengal, Madras, Bombay, the United Provinces, Burma, the Punjab, the North-Western Frontier Provinces, and Bihar and Orissa, and from Hyderabad, Mysore, Baroda, Bikanir, Travancore, Jodhpur and Sikkim. These exhibits included not only the various labour-saving appliances introduced amongst weavers, but also ranges of typical cloths woven in the various areas. In addition to the official exhibits, numerous dealers in hand-woven cloths and Co-operative Societies from all over India took up stalls where goods could be purchased, and valuable prizes and medals were awarded, both from Government funds and from the generosity of private individuals for original devices connected with hand-weaving and also for the products of hand-looms. A report showing the success of the Exhibition is given in the Appendices.

The All-India Hand-Weaving Exhibition, 1921.

Interesting information has been collected about other industries. For instance, preliminary investigation has revealed that while about 129,000 tons of linseed has been on an average exported in recent years, less than 8,000 tons appear to have been crushed locally, and no oil was exported. In the absence of any appreciable local demand for the oil or for the cake as fodder the prospects of building up an oil-pressing industry appear to be unfavourable. On the other hand about 162,000 tons of rape and mustard are crushed locally, and it appears that after deducting the quantity exported, which corresponds roughly to the output of the thirty power mills along the Ganges and elsewhere, there remain about 26,000 tons of oil and 81,000 tons of cake which are crushed by local *telis*, and consumed within the province. It is, therefore, possible that there exists an opening for a large mill with modern plant for expression. Enquiries into the production of castor-oil have revealed similar possibilities of local expression by modern methods. The average acreage under castor is estimated at 38,000.

Linseed.

Rape and mustard.

Castor.

An investigation of considerable popular interest is that which has been and is still being conducted into the possibility of reviving the manufacture of salt by solar evaporation on the Chilka Lake. The chief difficulty is constituted by the low salinity of the lake, due to the fact that owing to natural processes it no longer receives as in ancient times any direct discharges of tidal water from the sea. Enquiries have therefore been directed towards the possibility of cutting the sand-bank which separates the lake from the sea. But besides the expense and engineering difficulties of such a scheme there are other problems to be faced, such as the suitability of the soil and transport difficulties, all of which have grown in importance since the days when imports from abroad or from Madras were non-existent and labour was cheap.

Salt-making.

Other industries which have been investigated and in some cases assisted with advice are those for the production of paper pulp and of myrabolan extract, the button and the cutlery trades and the crude sodium sulphate or *khari* industry.

Miscellaneous enquiries.

No direct pioneering work has yet been done. On the ground of expense alone it would be impracticable in the case of any large industry. But enquiries have been made into the suitability of South Bihar for the introduction of white sugar manufacture. Bihar and Orissa is the chief producer of white sugar in India, but although the area under cane in South Bihar is just as large as in Tirhut, hitherto all the factories which produce it have been in Tirhut and in the hands of Europeans. The chief problem is how to obtain a safe supply of cane, and to ensure this confidence has to be established and cane-purchase started under the best possible conditions. Proposals have been laid before Government for the pioneering of this industry in South Bihar by starting a factory under Government management.

Pioneering work.

The decrease in maritime trade in Orissa, the incidence of economic distress among the coast population, and the results of annual emigration which takes place have led to the suggestions for the improvement of the port at False Point, so as to accommodate ocean-going vessels. This, with improved railway communications, would do much to develope the commerce and industries of

The False Point Harbour project.

Orissa. The discovery of first class steam coal in large quantities at Talcher, some sixty or seventy miles west of Cuttack, lends additional importance to the project, since not only could coal be despatched to Bombay and other centres very cheaply, but it is possible that pigiron might also be introduced locally for export. Cuttack has already shown its capabilities as a tanning centre. Angul and the Feudatory States contain bamboos and supplies of *sabai* grass which might make possible the growth of a pulping industry. Jute is grown in the delta, and railway development in the States might render a large stock of wood available both for a lumber trade and for the manufacture of bobbins and spindles for a jute industry. Everything, however, depends on the feasibility of developing the harbour at a reasonable cost.

Fisheries.

Another subject which is of considerable practical importance to Orissa as well as to Bihar, is that of Fisheries. Until April 1921 the development of Fisheries in this province was looked after by the Department of Fisheries, Bengal, a part of the expense being borne by Bihar and Orissa. The only distinctively local staff consisted of a District Fishery Officer in Puri, who was engaged in investigating the economic condition of the Chilka Lake fishermen. Soon after the introduction of the Reforms, it was decided that if money was to continue to be spent on the development of the fisheries of the province, the work should be transferred to the direct superintendence of one of the provincial departments, and the department of Industries was eventually chosen for the purpose. The actual organization to be adopted is still under consideration, but the work to be undertaken will fall mainly under two heads, the development of carp culture and the better exploitation of the Chilka and Orissa coast fisheries. Tank and river fish form one of the main items of diet for the people of the province, but the present methods of stocking tanks are very unsatisfactory, and together with overfishing in every available water have caused a growing scarcity of edible fish. To increase supplies and put tank culture on a scientific basis is the most important problem before the department. Much spade work has already been done, but further investigation is needed before the whole business can be placed on a commercial basis. In Orissa there are special problems connected with marine and estuary fisheries. The Chilka Lake already forms an important source of supply for the Calcutta market and so brings much profit to those

living on its shores. But there is danger of overfishing, besides much need of better market organization. Great opportunities also exist for subsidiary industries, such as fish curing, oil and manure, manufacture and canning. It is hoped that, as in Madras, the operations of this department will produce a fair revenue and may even render it eventually self-supporting.

Labour.

Another important branch of the Director's work is the investigation of labour problems. His duties include the reporting and analysis of strikes and lock-outs, the watching of labour movements, such as the development of Trade Unions, Labour Associations and Works Committees, the compilation of an index number of prices so as to gauge the rise or fall of the cost of living in industrial centres, the keeping of a statistical record of the rise and fall of wages of all classes of labour and the study of labour movements and literature in other countries and other parts of India, with a view to advise Government on labour matters and especially on labour legislation. Without such information Government, when confronted with disputes between employer and employed, often leading to the holding up of food-supplies, the dislocation of trade and widespread disorder, may be powerless to intervene with effect or to bring the parties together.

Co-operative Societies.

It is now generally recognized that in the extension of the co-operative credit system lies one of the most hopeful solutions of a part at least of the problem of the agricultural indebtedness of the masses, which hangs like a millstone round the neck of Indian statesmen. As is well known, the majority of small cultivators in this province are dependent on money-lenders for small advances almost every year. Marriage and funeral ceremonies, cattle epidemics, floods and drought, criminal and civil litigation are the chief causes of this recurring indebtedness, and a sure indication of its extent and of the difficulty which the cultivator finds in repayment is given by the high rate of interest charged by local money-lenders which averages 24 per cent. The security given is the only security available, the debtor's land. In many cases the cultivator owing to an unexpected failure of the harvest is unable to pay, and the *mahajan* takes his land; in still more cases the *mahajan* exploits the

The problem of agricultural indebtedness.

illiteracy and improvidence of his debtor by an intentional omission to call in his dues until the inevitable hard times occur and he forecloses.

The agricultural credit system.

The agricultural co-operative credit system in Bihar and Orissa is a simple one. The unit is the village society, composed of ten or more members, jointly responsible for each other's debts, and with their land as security. The society borrows from a central bank, generally situated at a subdivisional headquarters, at a rate of about 12½ per cent., and lends to its own members at about 15 per cent., the difference between these rates forming the society's reserve fund. The central bank obtains its capital at rates of from 4 to 8 per cent., usually from local depositors. The chief depositors buy preference shares on which they obtain good interest, subject to the liability to pay twice the face value of each share in the event of the failure of the bank. Sufficient share capital is called in by the bank to form a safeguard against unexpected falls in deposits; and a reserve fund is formed from the profit made on the difference between the borrowing and lending rates of interest. Directors are elected from the preference shareholders, and from representatives of affiliated societies, and these supervise the organization and development of societies as honorary workers; and a small staff, with eventually a salaried manager, runs the clerical and some of the organizing and inspecting work of the bank.

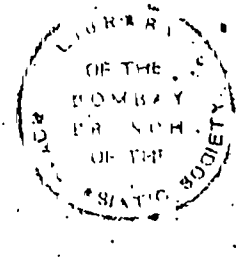
Village societies.

Central banks.

The Provincial bank.

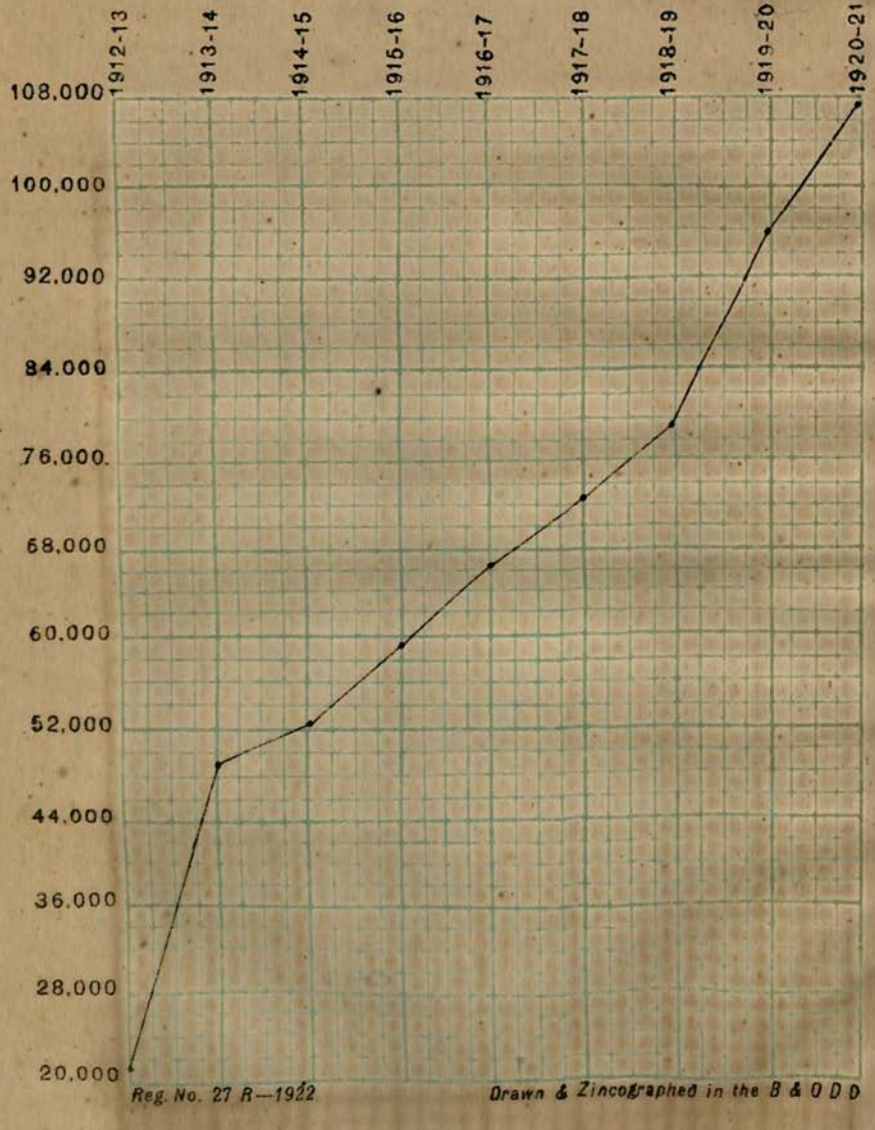
Financial stability is given to central banks by the Provincial Bank, which is able to obtain deposits at an even lower rate of interest from the general public, and to give to affiliated central banks cash credit for a sufficient amount to set them on their way in the earlier stages of their development, or later on to render practicable larger schemes, such as long term loans for land improvement and irrigation, educational and medical institutions, and also to assist the network of non-agricultural business organizations such as Sale Societies, Co-operative Stores, Artizan Societies, Dairies and Weavers Societies, which are already growing up in this province.

An intermediate link between central banks and affiliated societies has in the course of the last six years been provided by


OF THE
BOMBAY
OF THE
SIATIC SOCIETY

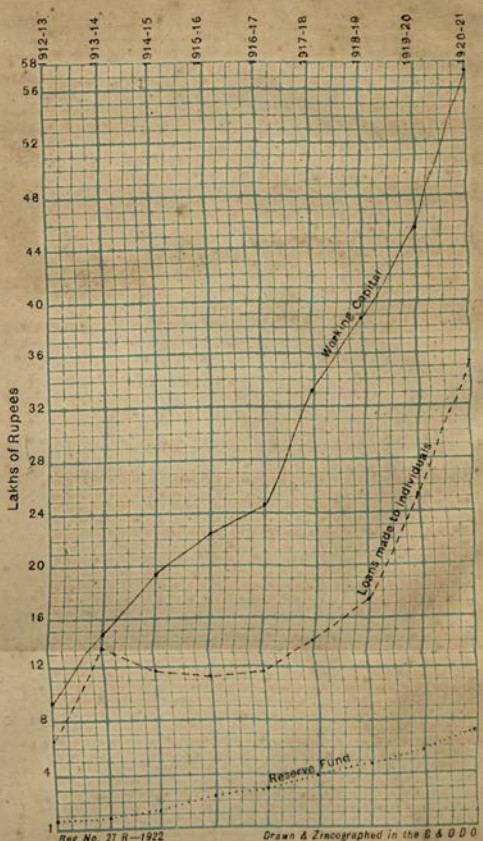
Diagram

showing the Annual total membership
of Co-operative Societies
from 1912-13 to 1920-21



Diagram

showing the amount of Working Capital, Reserve Fund and Loans to individuals of all types of Co-operative Society, from 1912-13 to 1920-21



Guarantee Unions, which have increased from a total of one in 1915-16 to seventy-nine in the year under review. The underlying principle of these Unions is that a minimum of five societies join together into a separate unit with joint security. Self-interest prompts each society to keep a watch on every other, and these small clusters of societies thus become self-governing and efficient. In the Daulatpur area, which with Supaul, is one of the areas where Guarantee Unions have been most successful, the Central Bank allows a rebate of 2½ per cent on loans repaid before the end of the year, and the Union societies make the same concession to their members. Progress in the organization of these Unions is necessarily slow, owing chiefly to the prevalent illiteracy of members of the societies. It seems, however, to have made a promising start.

Guarantee Unions.

The steady progress made by co-operative credit in Bihar and Orissa since the inception of the province is seen at a glance in the accompanying graph. In this period of nine years the total number of societies of all kinds has become six times as large, and now amounts to 3,458; central banks have increased from 8 to 42, and average nearly two to each district; the membership of societies has swelled from 21,000 to over 107,000, or more than 500 per cent.; loans to individuals, which amounted to about 6¼ lakhs in 1912-13, have now reached the imposing figure of 36¼ lakhs of rupees; a reserve fund of three-quarters of a lakh now amounts to more than 7¼ lakhs; working capital has developed from about 9 and two-fifth to more than 57 and four-fifth lakhs of rupees; and profits, which stood in 1912-13 at some forty thousand rupees amounted this year to Rs. 3,13,256.

Summary of progress made in Bihar and Orissa.

In the last co-operative year progress has been no less marked. There has been an increase of 569 in societies and banks of all kinds, of 11,945 in membership, and of Rs. 25,48,842 in working capital. The percentage of increase of central banks works out at eight and of societies at nineteen per cent. Out of the five new central banks opened this year two are novel departures. In the new Khunti bank the place of preference share-holders is taken by educated local gentlemen who under the designation of Guarantors guarantee without consideration to stand surety for the debts of the bank for a specified period up to a minimum of Rs. 1,000 each.

The last year's progress.

The new bank in Angul will endeavour to supply domestic necessities such as salt, cloth and oil to its members, who are at present, owing to the comparative lack of communications and to transport difficulties in the district, at the mercy of profiteering tradesmen.

Some economic benefits of co-operative credit.

An interesting sidelight is thrown in the last Annual Report of the Registrar on the economic benefits of co-operative credit. The Registrar has calculated that since the creation of the province more than 148 lakhs of rupees have been borrowed by members of societies, and on the assumption that the average loan was for two years and that the average *mahajan's* rate of interest is 24 per cent., a sum of 24 and four-fifth lakhs has been saved to the agriculturists and small artizans of the province, which would otherwise have gone into the pockets of the money-lenders. On the same basis the Registrar calculates that on the amount of 35¼ lakhs lent out from 1st July 1920 to 31st May 1921, there will be a saving to the borrowers by June 1922 of over 5 and nine-tenth lakhs of rupees.

The saving due to a reduced rate of interest.

This is only one of the many indirect benefits to the poorer population which the Co-operative movement brings in its train. There can be little doubt that much of the money which is now pouring in from small investors to swell the capital of central banks would otherwise be lying idle. The total deposits of all kinds in societies and banks on May 31st, 1921 was over 38 lakhs excluding over 13 and three-fifth lakhs of deposits in the Provincial Bank. In central banks over 21 lakhs were placed in deposit by local investors besides over 11 lakhs invested by outsiders. These figures not only testify to the increasing confidence of the public in the stability of the movement, but mark a significant advance in the education of the public in the value of investing their saving otherwise than in land as an alternative to hoarding. The growing popularity of these investments means a real increase in the wealth of the province.

The benefit to the small investor.

Another important development of recent years is that of the Savings Bank deposit. More than 20 central banks have opened these accounts and more than two lakhs of rupees have been invested at 4 per cent. In some rural societies the *muthi* or "handful of rice" system has been adopted. The theory is that a handful of rice is set aside by

Savings Banks deposits.

the member daily and deposited each month. Under the Supaul bank some Rs. 80 was collected in a month by this means. The extent to which thrift is being increasingly encouraged is shown by the fact that Rs. 1,86,395 is now held in voluntary deposits on behalf of the members of agricultural societies, and that this is an increase of more than 12 per cent. over the previous year's figures.

Non-agricultural Societies.

The organization of business schemes of direct economic utility is necessarily retarded by the illiteracy from which the vast majority of members suffer, and which not only renders them incapable of organizing but also leaves them easy dupes of their own managers and of the commercial public with whom they have to deal. But non-agricultural societies have made great strides recently. Only this year Grain Golas increased from 10 to 31 with a membership of 10,753, a working capital of Rs. 73,115 and a solid reserve fund of Rs. 24,821. These Golas provide loans of paddy to members at reasonable rates, and also create a reserve stock of grain for times of scarcity. One such Gola under the Banki Union is reported to have done invaluable work during the floods last year.

Grain Golas.

Co-operative Stores.

Co-operative stores show possibilities of a useful future in a province in which there still remain considerable tracts difficult of access, and in which the monopoly of trade by a small section of the community renders profiteering rampant in the towns as well as in the countryside. Stores are also used to encourage local industries. The Ranchi Weavers' Co-operative Stores, for instance, sold yarns this year worth Rs. 27,270, and with the help of the Director of Industries markets have been opened up for the sale of their finished goods in Assam, Calcutta, Jamshedpur and Patna. Cloth worth Rs. 23,566 was sold by this Stores during the year, and it has popularized the use of fly-shuttle looms. The Bhagalpur Weavers' Stores, which had a capital of Rs. 40,000 in May last, buys raw materials for its members, purchases the finished product and sells to the public. The extent of its transactions may be gathered from the fact that it bought more than 20,000 worth of cloth in the year. A new store started this year in Madhipura mainly by the efforts of the local directors is intended to serve the purpose of minimizing the loss to small cultivators from forced sales of their

grain when prices are low. The Society will pay its members a fair price for their grain, and by selling it later when prices have risen will bring in an additional profit to members. Co-operative Stores are growing popular with school students. Two new stores for students have been opened this year at Cuttack and Bettiah, and there are others at Hazaribagh, Motihari, and Cuttack which have been uniformly successful.

Artizan Societies.

Some useful work is being done in a small way by some 15 existing Artizan Societies, whose members are petty traders. The members of these societies employ their loans in business and repay them from profits, and include among other trades oilmen, carpenters, blacksmiths, potters, shoemakers and tailors. In the same category may be placed the Fishermen's Societies which have grown up within the last few years in the Orissa coast villages. There are now 18 such societies, 13 of them under the Khurda Central Bank, and 5 unaffiliated to any bank which were organized this year and financed by Government. The fishermen had fallen completely into the clutches of the money lenders, and the wide extension among them of Co-operative credit seems at present the only remedy for their indebtedness. As the very fact of their extreme poverty and inprovidence made the organization of societies on a sound financial basis difficult, Government have provided funds to put the societies on their legs. The Secretary of the Khurda bank reports that Khurda fishermen have already purchased 23 boats and 97 nets with the help of Co-operation and that there is a good chance of their economic recovery.

Fishermen's societies.

Miscellaneous.

Besides the types of society already mentioned there are in the province some Dairy Societies, which have not hitherto proved successful, two Contractors' Societies; and three People's Banks. A Co-operative Stores on a much larger scale than any hitherto started in the province has been registered this year at the industrial centre of Jamshedpur. This is being run by the employees of Tata's Iron and Steel works, and its progress will be watched with interest

Subsidiary activities.

In addition to the various direct activities of the Department of Co-operative credit summarized above, there are some subsidiary and indirect activities which show promise of producing equally important

economic and social benefits to the province. The first of these is education. Remarkable progress has been made in this direction of which the instances given below are typical but by no means exhaustive. In the Bihar Subdivisional area there are more than 25 *pathsalas* in society villages, most of which are under the direct management of societies. The Nawada Bank has an education fund of Rs. 2,400 and the Rohika Bank of Rs. 1,400 from which several *pathsalas* are maintained. Nineteen primary schools are maintained in the Aurangabad and five in the Daulatpur area, and more than 20 schools are aided by societies in Madhipura. The Banki union maintained this year one student in the Cuttack Medical School and another in the Puri Sanskrit College and voted Rs. 5,000 towards a building for a new High School. In the Balasore area every village in which there is a society contains a school to which members are compelled by their societies' rules to send their boys. Co-operative credit is thus doing its share in the solution of the social problem of education.

Agricultural Improvements.

No less conspicuous is the assistance rendered to the Department of Agriculture. No fewer than 30 sugar-cane crushing mills were hired out this year by one central bank to its members at Rs. 20 for the season, and six were sold by another on the hire-purchase system. Seed potatoes and cane cultivation were introduced in Jajpur. *Kamdars*, *i.e.*, selected and trained practical cultivators were maintained by two banks, and popularized the cultivation of groundnuts, cane, cotton, millet and *arum*. Pusa wheat has been extensively distributed by various banks. The beneficial effects of gypsum and of *kharia* salt as manures have been successfully demonstrated. Experiments have been made with various types of paddy and cane in different areas. The active assistance in propaganda which the Co-operative credit organization has shown that it can give should prove of inestimable benefit to the Department of Agriculture.

Land Improvements.

The question of the practicability of utilizing Co-operative societies for the disbursement of *Takari* loans under the Land Improvements and Agriculturists Loans Acts has been considered by Government during the year. The Banka Central Bank in Bhagalpur district has, as a preliminary to further action by Government, experimented with

the giving of long term loans from its own capital for the excavation of water channels, for sinking wells, and for repairing embankments, and a total of Rs. 4,790 has hitherto been advanced for the purpose. Loans for this purpose have also been advanced by other banks. The chief difficulty in the way of extending such loans is the difficulty caused by the length of time required for their repayment.

Staff and organization.

Broadly speaking the policy of Government on the eve of the Reforms Scheme was, while retaining a certain minimum of official control over the organization of the co-operative movement, and in particular over the audit of the Provincial and central banks, to leave the greatest possible scope to private initiative, and to discourage, as far as could be done without shaking public credit, the idea that the co-operative movement depends on Government support or that co-operative institutions can rely on Government to guarantee them against the results of their own mismanagement. Government have in other words fully realized that self-reliance is essential to the development of the movement on sound lines, and that while general supervision and advice must be provided by Government in the early stages, the sooner the movement can be dissociated from official control the more rapid will be its eventual development. It was in pursuance of this policy that the sanction was obtained in 1918 to the scheme of the Audit Federation.

The Audit Federation.

The Audit Federation comprises within its membership all central banks and all societies. Its members elect delegates who attend the meetings of the Federation Congress, and the Congress in its turn elects the Advisory Council of 10 members in which, with the Registrar of Co-operative Societies as *ex-officio* Governor of the Federation, the management of the whole organization is vested. Its objects are to promote all forms of co-operation and such subsidiary activities as education, medical relief, etc., and above all the supervision, audit and control of its members.

Its objects.

Of these objects audit is the most important. Audit is at present conducted by four Divisional Auditors on pay of Rs. 150—250 and by 37 Local Auditors on Rs. 55—82. These officers are the servants of the Federation. The former have been selected from the ranks of Bank managers and have received special training in a firm of accountants and bankers, and the

latter, drawn partly from the ranks of inspecting clerks and partly from outsiders, have been trained by the Federation.

Its income.

The income of the Federation is derived from three sources. The first comprises affiliation fees of Rs. 2 from each society and of Rs. 25 from each central bank; the second consists of audit fees. At present agricultural societies (of more than two years standing only) contribute at the rate of six annas and non-agricultural societies at the rate of four annas per cent. on their working capital; while central banks pay an additional contribution at the rate of four annas per cent. on their own working capital for the audit of their affiliated societies. The third source consists of subsidies from Government, which consisted from the last financial year of (*a*) Rs. 10,000 for Divisional Auditors—this is a recurring grant promised for three years; (*b*) Rs. 10,000, also for three years, for inspecting clerks in new and backward areas; (*c*) Rs. 20,955 audit contribution at the rate of Rs. 15 for each young society and for those in backward areas, and at the rate of Rs. 3-8-0 each for all other societies. The audit is conducted under the supervision of the official staff of the department, which consists at present of 5 Assistant Registrars each in charge of a Division, and of course of the Registrar himself. This arrangement will, it is hoped, be found to provide adequate official control over audit to guarantee public credit, while it leaves the co-operative movement free to develope along its own lines through the medium of a non-official organization. The Federation supports a printing press which is already beginning to be self-supporting.

The Forest Department.

Probably the aims and objects of the Forest Department are less understood by the public than those of any other Department of Government. Thousands of cultivators who inhabit one or other of the forest tracts in Chota Nagpur, Orissa and the Santal Parganas are dependent for their daily needs on forest produce. The cultivator requires wood for fuel, fencing, building and agricultural implements, bamboos for baskets and mats, leaves for plates, twigs for tooth-brushes, grass and fibre for string and rope, and in times of scarcity the edible roots and fruits with which the neighbouring forests abound. Both the cultivator proper, and still more the professional grazier, finds in the forest lands near

The economic utility of forests to resident cultivators.

his village huge grazing grounds capable of providing abundant pasture for cows and bullocks, buffaloes, sheep and goats. But in the Government forests he is hedged in with restrictions and prohibitions in all directions. His cattle may only graze in certain places and up to a certain number. There are Government officials who collect fees for excess cattle and prosecute him for unauthorized grazing. He must alter his grazing grounds perhaps from year to year. There are some forests in which he may not set foot, others in which he may collect leaves and brushwood, but may cut no branches and fell no trees; others again in which he may lop certain trees and dig certain roots, but must obtain a permit from the District Officer or a forest official before he can cut any large timber; and even then the exact kind must be specified, the locality and the period of cutting. In other forests the areas in which he can cut wood are varied, apparently capriciously, at different periods. It is hardly surprising that the cultivator often views with dismay the activities of the Forest Department.

Forest Department rules.

The explanation of these apparent vagaries can only be understood by taking a comprehensive view of the various conflicting interests which the department has to weigh in the balance. Broadly speaking these are four, first those of the resident agricultural population, secondly those of their descendants, thirdly those of the State, which requires revenue both to pay for the development of the Department and for other objects beneficial to the tax-payer, and fourthly the wider economic interests of the country at large.

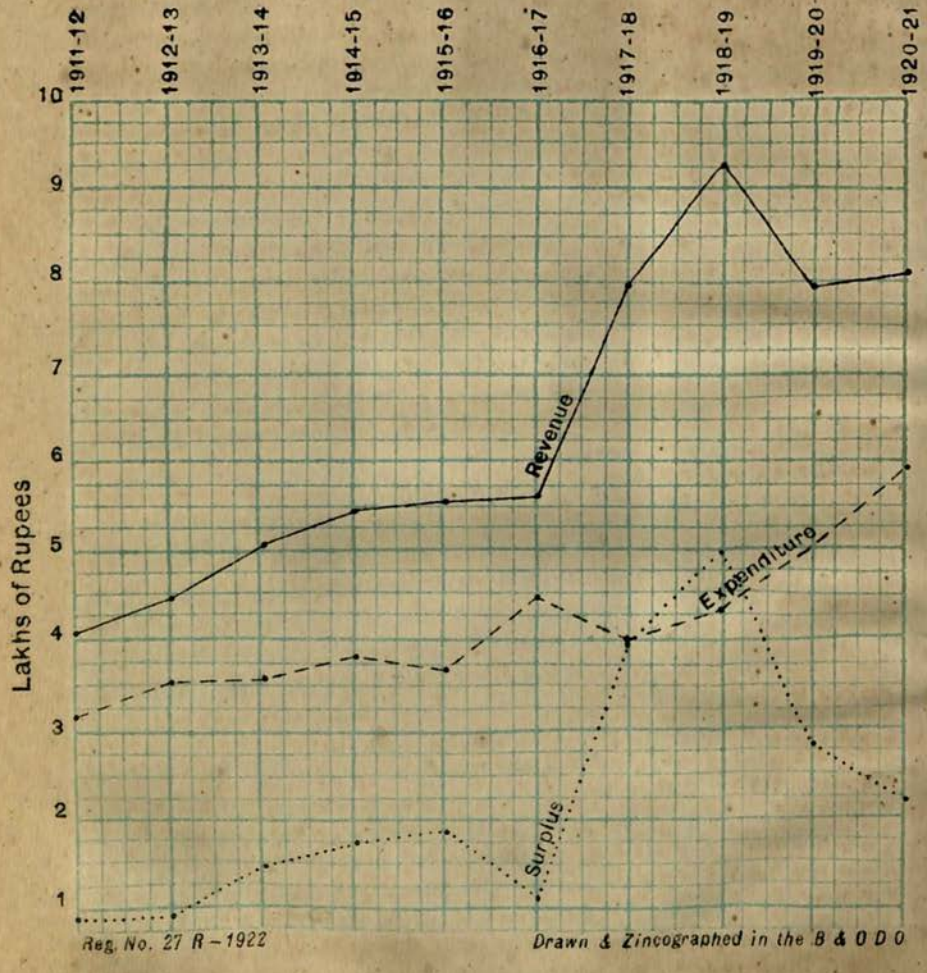
The policy which underlies these rules.

Forests known as "Reserved" are managed primarily for the last two and "Protected" forests primarily for the first two objects. Reserved forests are generally those the preservation of which is essential on climatic or physical grounds or which affords a supply of valuable timber for commercial purposes. Bihar and Orissa, which comprises 83,181 square miles of boundary, contains only about 1,750 square miles of reserved forest. Before a forest is declared reserved all existing rights therein are ascertained, recorded, and so far as possible preserved, or if that is not possible, commuted. Such provision as may be necessary is then made for the supply of small timber, fuel, leaves, thorns and pasture either free or at low rates to the com-

"Reserved" Forests.

Diagram

showing Annual Forest Revenue, Expenditure.
and Surplus for the 10 years ending 1920-21



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munity dwelling on its margins. For instance, 24 per cent. of the total area of reserved forests was this year left open for grazing. The forest is then managed more or less on commercial lines. It is regarded as so much capital, and its annual growth as the income of that capital. By the adoption and periodical revision of working plans the felling of timber is localized and restricted, and the improvement of the growing stock and the replacement of fellings by afforestation is guaranteed. The forest thus becomes a paying business concern. The revision of working plans in order that advantage may be taken of the results of past management and to meet new demands for forest produce is a work of considerable difficulty and importance. This year a revised working plan for the Porahat division was completed, and progress made with those of the Singhbhum, Puri and Sambalpur divisions. The accompanying graph shows how the forest revenue in Bihar and Orissa has doubled since 1911. The expansion, slight at first, reached its climax in 1918-19. This was due to a temporary cause, the supply of timber during the war to the Munitions Board; but there is little doubt that revenues could have been permanently increased had a more progressive policy been rendered possible by the employment of a larger staff, instead of being curtailed by the need for retrenchment.

Statistics of forest revenue.

Protected forests on the other hand are generally speaking either those which supply inferior sorts of timber or which consist largely of grazing grounds. In Bihar and Orissa protected forests cover about two thousand square miles. In these forests there is generally speaking no bar to the accrual of rights. The object of protection is to secure by "working schemes" the regulation of the destruction of timber, the saving of grazing grounds from deterioration and control over the removal of certain produce. These schemes, it is now recognized, should usually prescribe first a rotation period corresponding to the number of years required to produce the timber needed by the villagers, secondly the division of the forest area into as many small blocks or "coupes" as the number of years in the rotation period, and thirdly the restriction of fellings of timber to one such coupe a year. Such restrictions are placed on grazing as will, while safeguarding the legitimate claims of resident cultivators to pasture for their agricultural stock, at the same time save grazing areas and

Protected forests.

young forest growth from deterioration or damage, and will ensure that professional graziers pay a fair price for the privilege of pasturing their large herds of cattle, which are kept for commercial rather than agricultural purposes. For instance 47 per cent. of the total area of protected forests was this year left open to grazing. Protected forests are not managed primarily for profit, but sufficient income must if possible be produced to pay for the expenses of management, and if necessary for public works of local utility. If the schemes just outlined are successful the resident population obtains the maximum increment from the forests compatible with their preservation for future generations. One instance of the successful working of the "coupe system" may be seen on the Saitba hills near Chaibassa. Twenty years ago these were thin scrub jungle. Now they are dense pole forest, while the resident cultivators obtain their requirements under free passes. The demarcation of protected forests with a view to the introduction of this system has been carried out in Khurda, Puri and Angul in recent years; and the system is now being tried in Palamau.

Some harmful effects of denudation.

Mention has been made above of some of the obvious economic uses which forests serve for the neighbouring agricultural population. But they serve more far-reaching purposes of which this population is in most cases unaware, and the results which follow the ignorant destruction of forest demonstrate more clearly than anything else the value of the expert knowledge and administration which the Forest Department provides. In the first place there are good grounds for believing that the amount and distribution of the rainfall are affected by the extent to which the country over which moisture-bearing currents pass is or is not covered with vegetation. Secondly the preservation of forests exercises a powerful influence in arresting floods and land erosion. The problems to which the gradual denudation of the Orissa and Chota Nagpur forests have given rise were tackled by a committee appointed by the Government of Bengal in 1908. The report of this committee

Denudation in Chota Nagpur and Orissa.

called attention to the startling speed with which Chota Nagpur, which was at one time a huge *sal* forest, was being denuded. In the Govindpur area in Manbhum about 50 per cent of the forest

area was reported to have disappeared in the last 30 years; in Ranchi denudation had made enormous strides within 20 years. In two of the Feudatory States in North Singhbhum the hills were bare and scarred with erosion as a result of this process. In Sambalpur the Bargarh plain had been completely denuded. In Orissa though there were still large areas under forest there had been an absolute clearance of valuable timber. The exploitation by contractors, reckless and wasteful cutting by villagers, destruction by fire and unregulated grazing were found to have been the chief causes of denudation. The committee pointed out that denudation had played an important part in increasing the tendency of the rivers and streams of Chota Nagpur to cause rapid floods, and had resulted in a dearth of timber and fuel to supply the needs of the aboriginal population and in the gradual destruction of grazing lands. The loss to agriculture had also been considerable. With the destruction of forests the sub-soil water level recedes, leaf manure is lost, erosion covers the fields with sand, and the denuded areas suffer the extremes of heat and cold.

The action subsequently taken by Government.

A Private Forests Bill was drafted which it was hoped would enable Government to take steps to retard further denudation, but it was not found practicable to proceed with it, and subsequent action has been mainly taken in two directions. First, applications have been encouraged on behalf of estates declared to be Encumbered Estates under the Chota Nagpur Encumbered Estates Act (VI of 1876) for the management of their forests by Government. No fewer than 20 such applications were received in 1918-19. Secondly a beginning has been made with the selection of suitable forest areas for acquisition by Government with a view to their protection from destruction. Two areas recently acquired are those of the Banspahar forests, of which the Katabil area, covering about 3,000 acres, and the Rajadera area, covering about 1,400 acres have been acquired and will be declared reserved forest as soon as the forest settlement has been completed.

The Banspahar forest acquisition scheme.

One interesting illustration may be given from Chota Nagpur of the far-reaching effects of denudation, namely that of the forest area in the Chota Nagpur hills from which the Damodar river takes its rise. The residents in this "catchment area" of the river

The Damodar Catchment area acquisition scheme.

Damodar have for generations been contributing to the gradual deforestation of their native hills. As a direct result of the thinning of the forests the flood discharge of the river has gradually increased, the land at the foot of the hills has become denuded, and the river has carried down with it an ever increasing volume of solid material washed from the unprotected and crumbling areas on its banks. Owing to the decreasing slope of the country from the hills to the bay of Bengal the river cannot transport its sediment to the sea at the same rate as it picks it up in the hills; for the velocity of its stream is decreasing and it must leave its sediment somewhere *en route*. The deposit of silt has gradually raised the level of the area along each bank above the level of the surrounding country, and this has been a chief contributing cause of the devastation caused by the Damodar floods. Nor are the effects of these causes confined to this province. For the vagaries of this river, attributed in part to the denudation of the Chota Nagpur hills, might ultimately have serious effects on the channel of the Hooghly.

The denudation of private forests.

The dangers of unrestricted grazing are also illustrated in the same Damodar catchment area. Two years ago the Conservator of Forests visited some private forests in this area. Everywhere, he reported, were evidences of denudation, and this was most marked on the grazing grounds near the big rivers. In these grazing grounds the disappearence of the small trees, which had formerly protected the soil from the excavations of rain, had resulted in the formation of regular rivers, and, where there was only a thin layer of upper earth, in the exposure of thousands of acres of sheet rock on which not many years ago there had been a good covering of soil. In order to provide some check on the further destruction of this area an estimate is now under preparation for the acquisition of about 15,000 acres of land in the Damodar Catchment area.

The Palamau forests.

In Palamau a large part of the forests even in Government estates has for many years been handed over to the inhabitants for free use, another part has been reserved as containing valuable timber suitable only for state management, and the rest has been left in the administration of the district authorities for such protection as will ensure its the necessity for more scientific management has already become

apparent, and it has accordingly been recently transferred to the Forest Department: while about 4 square miles of this protected forest, containing good timber, and not essential to the needs of the residents has been declared reserved.

Some results of proper forest management.

Sufficient explanation has been given above of the dismay with which the Forest Department views the denudation of forest areas, the increasing disregard by resident cultivators of the forest rules and regulations, which there is not a sufficient staff adequately to enforce, and the resultant gradual but sure disappearance of some even of the protected forests. But a few figures may be given to indicate the beneficial effects of the management of such forests on business lines. In 1895, for instance, the forests of the Raja of Porahat were taken over by Government for managment, and they have since steadily improved in capital value. The net surplus had in 1911-12 reached over Rs. 41,000. In 1916-17 it reached Rs. 72,500, and in 1921-22, Rs. 3,07,200. The Feudatory States provide further illustrations. Since the appointment of an Agency Forest Officer to assist the States striking results are reported to have been obtained in the last eleven years, though the destructive waste of the past may take many generations of labour to remedy. The total forest revenue of the 26 States has risen from over nine to over seventeen lakhs since 1915-16. In two States, Athgarh and Banpur, revenue has doubled in one year. In Mayurbhanj a total expenditure of 1 lakh was balanced by a revenue of nearly 4 lakhs.

Forest industries.

A reference has been made above to the possibility of increasing revenue by expanding the superior staff and by a generous policy of productive expenditure. The arrival of three new trained Imperial recruits in March 1921, and of 3 more and of a forest engineer by the close of the year, affords a prospect in the near future of the devotion of more time by the superior staff to what is called the "utilization" branch of work, in other words to the organization of forest industries. Besides the uses to which the cultivator puts the forests they include among their finished products pencils, furniture, carriages, bobbins for jute and cotton mills, silk both natural and artificial, paper, dye-stuffs, tan-stuffs, rosin, turpentine and lac. There are grounds

for believing that the waste timber of Sambalpur might be converted into good charcoal and the utilization of the bamboos of the Angul forest division to supply a paper pulp factory is a matter which is under enquiry. Rs. 7,730 were realized from the sale of bamboos extracted departmentally in the Santal Parganas during the year, and royalty of Rs. 18,427 was received for bamboos removed during 1920-21 by purchasers throughout the province. A question which is growing in importance is how to supply the increasing demand for pit-props for mines. Sabai grass in Singhbhum and Porahat is leased and yields a substantial revenue. Finally, more than half the total world supply of lac is supplied by Bihar and Orissa. Government have recently considered how to increase the output of lac by improving the methods of cultivation and by keeping sufficient quantities of brood or seed lac for the propagation of the next season's crop; and a farm has been established at Kundri near Daltonganj this year comprising some 421 acres of open forest of *Palas*. The experience already gained at Kundri will assist Government in investigating the possibility of the departmental propagation and collection of lac, which in the Central Provinces has resulted in annual profits of from 4 to 5 lakhs of rupees. A report has been published on the subject of lac recently by Messrs. Lindsay and Harlow, and a lac Association has been formed which intends to set up an institute for research. A site near Ranchi has been offered by Government.

Bamboos.

Pit-props.

Lac.

Among the subsidiary activities of the Department may be mentioned the Casuarina plantation at Puri, which is intended ultimately both to supply fuel for the townsfolk and pilgrims and to arrest the drifting of sand over adjoining cultivation. Additional land has already been acquired to protect the catchment area of the Puri water supply. The question of acquiring land on and around the Dalma hill for a fuel supply to the rapidly growing town of Jamshedpur has also been examined and an estimate prepared, which is now before Government. Measures were also taken this year to encourage the planting of *mahua* trees. In Angul alone some 9,000 trees have

The Puri casuarina plantation and the Dalma hill project.

been recently planted; experimental plantations have been made in Ranchi and in Puri, and District Boards throughout the province have been encouraged to plant a regular supply of these trees, which are not only a useful contribution to food supplies but may also prove to be a valuable source of alcohol for industrial purposes and possibly of "power" alcohol.

Mahua plantation.

The department has attracted little notice so far in Council. Objections were raised during the budget debates to the expenditure on buildings, but these were withdrawn as soon as it was pointed out how serious had been the mortality among forest officers, both superior and subordinate, particularly in the Singhbhum forests which are perhaps the most unhealthy in India. The importance of improving the accommodation of the forest staff was recently emphasized by the late Inspector-General of Forests after a tour of inspection in this province, and steps have been taken to remedy this defect. Two rest-houses were completed in 1919-20, a third in Sambalpur is in progress, and two more in Palamau and Porahat have been begun this year.

The Survey and Settlement Department.

The agrarian conditions of the province have inevitably formed the background of this chapter, which is mainly concerned with the various problems to which land gives rise. The security of land tenure has always been recognized by Government as an object of primary importance. It was secured to the landlords in perpetuity by the Permanent Settlement, and the no less vital interests of the tenants have been safeguarded not only by various tenancy laws, but by a continuous series of Survey and Settlement operations extending over more than a quarter of a century. Now that the operation of mapping and preparing a record-of-rights of all lands in the province is nearing completion it is appropriate to review the work carried through and to give some idea of its extent.

An interesting summary of the Bihar (as distinct from the Chota Nagpur and Orissa) Survey and Settlement operations is contained in the review by the Board of Revenue published with the Final Report of the Gaya Settlement. For some time previous to the passing of the Bengal Tenancy Act in 1885 the conviction had been growing that legislation alone would not provide a sufficient

safeguard for the interests of the *raiyat*; and the great famine of 1874 and the long enquiries which preceded the passing of the Bengal Tenancy Act were responsible for the initiation of the present system by which each district is mapped plot by plot, and a detailed record-of-rights prepared showing the rights both of landlord and tenant in every corner of the province. The scheme was not started without strong opposition on the part of landlords, and that this opposition is still a factor to be reckoned with was proved in the debates in the Council this year which resulted in the postponement of the Orissa Revision Settlement operations. Work was begun in Muzaffarpur and Champaran in 1891, and during the next quarter of a century field maps and detailed records have been prepared for every district of Bihar. The area so surveyed comprises 36,000 square miles, 41 million plots, 7 million holdings, a cash rental of 40 million rupees, and an area of 3 million acres under produce rents. The cost has amounted to more than 1½ crores of rupees, of which about one-eighth has been paid by the State, one half by the landlords, and three-eighths by the tenants. But as a result the agrarian population has been placed in possession of reliable and authentic title-deeds; the courts of justice are provided with the means of identifying areas, boundaries, rents and every incident of land tenure, and the administration has been facilitated in all its branches by the records and statistics of the department.

Survey and Settlement in Bihar.

In Chota Nagpur agrarian trouble in Ranchi district led to the starting of similar operations in 1903. The last Chota Nagpur district, namely Manbhum, is now being surveyed, and the programme should be completed in 1924-25. In this division 24,000 square miles have been surveyed, containing 16 million plots and nearly 1½ million holdings, with a cash rental of 350,000 rupees and an area of 86,000 acres under proceduce rents. Fair rents for no less than 386,000 *raiyats* have been settled, and the cost has amounted to 56 lakhs of rupees. In Orissa operations have only covered the temporarily settled estates, Government estates, and some of the permanently settled estates, comprising an area of 10,700 square miles, and containing 11½ million plots and over 2½ million holdings, with a cash rental of 49 lakhs and a produce rented area of

Operations in Chota Nagpur.

and in Orissa.

30,000 acres. The rents of a quarter of a million *raiyats* have been settled, and the cost has amounted to 38 lakhs of rupees. In addition to these, *diara* settlements are constantly in progress all along the banks of the Ganges.

Tenancy Acts.

It is worthy of note as illustrating the difficulties of administration in a heterogeneous province like Bihar and Orissa that no less than six tenancy laws have to be administered. The Bengal Tenancy Act applies to Bihar proper, excluding the Santal Parganas, where the Santal Parganas Regulations are in force. Chota Nagpur has its own Tenancy Act, which was amended so as to bring it up to date in 1920. Orissa again has its own Act, which was enacted in 1913. In Angul there are special Regulations, and the Central Provinces Acts, which were in force when the district was transferred to Bengal in 1905, are still applicable to Sambalpur. The Bengal Tenancy Act was amended in 1907. Its further amendment, which it was always expected would be necessary as soon as the record-of-rights for South Bihar was completed, had to be postponed owing to the Great War. It was taken up in 1918, and an amending Bill was drafted, and again postponed in deference to a widely expressed wish that its consideration should be left over to the Reformed Council. A committee was appointed during the year to consider what amendments are now necessary.

Besides the relationship between Government and the tenants brought about by the conduct of Survey and Settlement operations Government also come into direct touch with agrarian problems as a landlord. There are various ways by which Government attain this position. Certain backward areas of the province, like the Damin-i-koh in the Santal Parganas and the Kolhan in Singhbhum have never been included within the ambit of permanently settled estates. Others like the Khurda Estate in Puri and the District of Angul have been forfeited to Government by acts of rebellion. Minor additions are made from time to time. Thus an estate may escheat to Government in default of heirs.

Government as a landlord.

Government may, when the temporary settlement of an estate has expired, manage the estate direct instead of farming it or setling it with the tenants, and estates may come into the hands of Government through the failure of landlords to pay the land revenue.

There were this year no fewer than 327 Government estates held under the direct management of Government, of which 81 were held on behalf of individuals; all Government estates are managed by the Board of Revenue though the agency of Commissioners and Collectors and this work constitutes an important part of their duties. It is only possible here to select a few statistics to illustrate the general scope of this branch of their work. The current demand in Government estates in 1920-21 amounted to Rs 19,20,265, and remissions of grace to Rs. 23,534, made either, as in the case of the Santal Parganas, in favour of raiyats who enlisted for military service during the war, or owing to the poverty of tenants, deterioration of the soil and damage to crops by flood. Management charges amounted to 8.82 per cent. on the current demand, and Rs. 1,32,289 were spent on improvements. A grant of Rs. 2,10,000 is made annually to the Board, representing nominally 14 per cent. on total collections, of which 8.5 per cent. is intended for management and 5.5 per cent. for improvement charges, and this grant is distributed by the Board to Commissioners, who have discretion to use it in their respective divisions as they think best. The expenditure on improvements amounts to an imposing figure. Last year more than a quarter of a lakh was spent on tanks and wells and another quarter of a lakh on drainage, irrigation and embankments, and these figures are not above the normal. In addition to this expenditure a grant of about 20,000 rupees a year was made previous to 1916-17 for the purposes of education. Subsequently Government have discontinued this grant, which amounted to 1 per cent., and another of 1½ per cent. on the current demand for roads and communications, and in lieu thereof now pay to District Boards the full rate of cess without deduction on account of land revenue demand, except in the districts of Angul and Sambalpur and in the Damin-i-koh estate in the Santal Parganas. Rs. 18,000 were granted to the last named estate for education during the year.

Government estates in 1921.

Improvements and education.

There is another important class of estate in which though Government is not the landlord the management is actually carried on under the supervision of the District Officer. This class comprises, first Trust and Attached estates administered by the Collector subject to the control of the higher revenue authorities;

secondly Wards' Estates administered under the Court of Wards Act of 1879, and managed either by officers of Government lent for the purpose or by salaried managers; and thirdly encumbered estates taken over under the Chota Nagpur Encumbered Estate Act. Under the Court of Wards Act the estates of females, minors, lunatics and of persons declared by a civil court to be incapable by reason of physical infirmities of managing their own property, may all be taken over by the Court of Wards; and under this Act wide powers of discretion are given to the Court to take over estates from persons who themselves apply to be declared disqualified, and who come to the court for the assistance which temporary expert managership may afford to an estate which is in difficulties. In Chota Nagpur special provision is made under the Chota Nagpur Encumbered Estates Act for the taking over of estates which are in danger of extinction from the wasteful extravagance of their owners.

Trust, Attached, Wards' and Encumbered Estates.

There were this year 135 estates under these three classes of which 78 were managed under the provisions of the Chota Nagpur Encumbered Estates Act. In the case of Wards' and Encumbered Estates one of the chief problems of their administration is caused by the weight of debt with which so many of these estates are burdened; for all estates taken under the Encumbered Estates Act are heavily embarrassed, while few of those which are taken under the Court of Wards Act are free from debt. The magnitude of the problem may be gauged by the fact that in the last nine years more than 203½ lakhs of debt have been paid off in these estates, and that there is still a balance of over 128½ lakhs of debt left undischarged. About 12½ lakhs were paid off last year. Seven estates were released this year free of debt, and three were taken in charge. Of these, though one is said to be free from debt, another which has an income of less than 11,000 rupees has debts of 63,000; and the third has an income of about 14,000 and debts of over 26,000 rupees. In one case the estate has been taken over in order to protect the interests of the tenants and of the minor proprietors, another to free from debt the estate of an old and loyal family at the proprietor's request, and the third to protect the interests of the minor

The problem of the Indebtedness of Wards and Encumbered Estates.

proprietors. These are typical instances of the work which revenue officers of Government are called on to perform every year. More than 2½ lakhs were spent on schools, dispensaries, and charities and nearly 1½ lakhs on agricultural and sanitary improvements.

Council Resolutions about Wards' Estates.

The affairs of Court of Wards' estates attracted attention on two occasions in Council. One occasion was that of the resolution on the Bettiah estate to which a reference has already been made in Chapter II. The other was that of a resolution carried in the second session recommending the appointment of non-official Indians as managers of such estates. The resolution was accepted by Government who maintained that they had been following this policy and that the claims of Indians had been held in ever increasing regard in recent years, and showed that out of 18 appointments made since 1917 only three were of Europeans and only four of official Indians.

CHAPTER V.

Government and Social problems.

The maintenance of law and order and the administration of justice are the primary social problems with which every Government is faced. The subject naturally falls under three headings, first the work of the police, which consists primarily in the detection and prevention of crime, in the preservation of the public peace and in the bringing of offenders to justice; secondly the administration of justice in the courts of law; and thirdly, the system of State punishment, which comprises the whole subject of jails.

The maintenance of law and order and the administration of justice.

While the superior posts in the police have hitherto been almost entirely filled by Europeans, an important change of policy in this direction has been announced this year in the decision that 33 per cent. of the annual appointments to the Indian Police are now to be filled by the appointment of Indians. The total police force in Bihar and Orissa amounted in 1920 to 14,990 officers and men and the total cost to Rs. 68,53,481. Sixty-six per cent. of the subordinate force was literate. The cost works out at an average of just over Rs. 38 a month for each member of the service, while the annual cost per head of the population amounts to 3¼ annas only. Under the revised scales of pay sanctioned this year constables draw from Rs. 15 to Rs. 20 a month only, Head Constables according as they are literate or illiterate Rs. 25—35 and Rs. 24—30 respectively, Sub-Inspectors from Rs. 80—130 and Inspectors from Rs. 175—250 with selection grades for 10 per cent. of the total number on Rs. 275 and for 5 per cent. on Rs. 300. It is difficult for an impartial critic of this scale of pay to sympathize with the charge so often made that the police are over-paid. The comparatively small numbers of the force are indicated by the fact that there is only one policeman to every 5.9 square miles and to every 2,460 persons in the province, a smaller proportion than in any

The Bihar and Orissa Police force.

other Indian province except the Central Provinces, in which, though the proportion of police per head of population is nearly double (1 to 1,349) the proportion to total area is smaller (1 to 9 square miles). In England there is roughly one policeman to 1.3 square miles and to 514 persons, excluding the metropolitan area where the proportion is even higher. In the matter of cost comparison is impossible, the cost of the London police alone being about £6,815,713 a year.

There is a steady proportion of agrarian lawlessness in the province. Proceedings under section 145 of the Code of Criminal Procedure, which deals with disputes about the possession of land, have maintained a steady average of about 1,087 a year for the last ten years, while out of the annual average of 426 cases of rioting and unlawful assembly in that period, and of over 1,110 cases of grievous hurt and hurt, the great majority may be safely ascribed to agrarian disputes. None of these figures show any marked fluctuation since the creation of the province. Interesting fluctuations occur however in the statistics of burglaries and thefts, which are illustrated in the diagram opposite. While the average annual number of burglaries for the period 1911 to 1914 amounted to 17,353 and of thefts to 14,908, and for the period 1916-18 to averages of 16,891 and 14,927 respectively, in the year 1915 burglaries jumped to 20,795 and thefts to 17,491, *i.e.*, increased by over 20 and 17 per cent. respectively. A similar increase on an even larger scale took place in 1919 when burglaries stood at the enormous figure of 28,339 and thefts of 22,479, which represented increases of 60 and 52 per cent. over the figures of the previous year. Again in 1920 though the figures fell in both cases, they were considerably higher than the average. These fluctuations, like those in the birth rate in England in the last century, illustrate the immediate effect of economic stress on an agricultural population; for the years 1915 and 1919, and to a lesser degree 1920, were marked by high prices and prevailing scarcity. Another interesting fact which the diagram illustrates is the almost exact correspondence between the statistics of thefts and burglaries respectively.

Land disputes.

The economic curve in the statistics of theft.

The same causes are partly responsible for the fluctuations in the statistics of gang robbery or dacoity, but are complicated in this

case by other causes such as the escape or release from jail of notorious criminals, or the invasion of Bihar and Orissa by gangs from neighbouring territory. The two divisions in which this dangerous form of crime prevails are Chota Nagpur and Bhagalpur, the former being responsible for 1345 and the latter for 483 out of the total of 2,377 dacoities in the nine years 1912 to 1920. Dacoities showed a gradual increase between 1915 and 1917 from 146 to 213, doubled in 1918 to 408, doubled again in 1919 to 815 and dropped back in 1920 to 274. The increase in 1915, confined mainly to Chota Nagpur, was ascribed to economic causes, the aboriginal Bhumij population having been driven by the loss of the rice crop and suspension of the lac industry to wholesale looting of their neighbours' property. The further increase of dacoities in 1916 is said to have been mainly due to the failure of the police to break up the gangs which had formed in the previous year. In 1917 the statistics were swelled by the inclusion of 31 cases of gang robbery committed by bands of Hindus in the great Bakr-id disturbances in Shahabad and Gaya districts. In 1918 economic distress accounted for the increase in some districts, but the main factor was the famous Bhumij gang of Chota Nagpur, three of the leaders of which had escaped from jail in the previous year. In 1919 about one quarter of the increase was due to the inclusion of further Bakr-id gang robberies from Shahabad, but 70 per cent. of the cases were again from Chota Nagpur. It was, however, the last effort of a gang rendered desperate by fear of impending retribution and by the severe economic scarcity which had swelled the ranks of common thieves by over 50 per cent. throughout the province in that year. The leaders had been arrested the previous year and confessions had been made relating to no fewer than 100 cases and implicating 262 persons, while over 1,000 persons were known or suspected to be connected with the gangs. The decrease of dacoities in 1920 may be directly ascribed to the measures taken by the police, who with the help of an armed force of 200 men arrested and prosecuted no fewer than 262 bad characters in the affected area. This summary gives some indication of the forces of disorder which even now are at work beneath the surface in parts of this province, and of the dangers which would result from the practice of unwise economies affecting the police.

Dacoity.

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There is no space to deal in detail this year with other forms of crime. Brief mention may however be made of murders. The statistics of murder have remained fairly constant, averaging about 200 reported cases annually. While the majority of murders in the past nine years have been due to domestic quarrels and intrigues with women, and to land disputes ending in petty riots, an appreciable proportion have been the result of superstition. There have been no fewer than 118 murders of suspected witches from 1912 to 1920, or an average of over 13 a year. Most of these were committed in Chota Nagpur, particularly in Ranchi district where the aborigines have still a firm belief in witchcraft; nor is there at present any sign of a decrease in this form of murder. Murders for gain are common including fatal assaults by robbers and dacoits, and there are not a few murders of children for the sake of their ornaments. Murders by means of poison averaged 11 a year between 1912-1917. Among unusual cases of murder may be mentioned that of a woman in Champaran district who in 1916 allowed herself to be sacrificed by her husband in the belief that her ghost would enrich him after her death.

Murders.

These statistics of murder do not include infanticides, of which 185 have been reported to the police, or an annual average of 20.5 in the nine years up to 1920 since the province was created. Unfortunately there is every reason to believe that the actual number of infanticides far exceeds this number, as the village chaukidar whose duty it is to report these cases can often be bribed to keep silence by the relatives of the culprit. The culprits are in the large majority of cases widows, owing to the social custom which prohibits them from remarrying. Over 70 per cent. of the deaths reported annually as due to suicide, of which there were 1,353 in 1920, are those of women.

Infanticide.

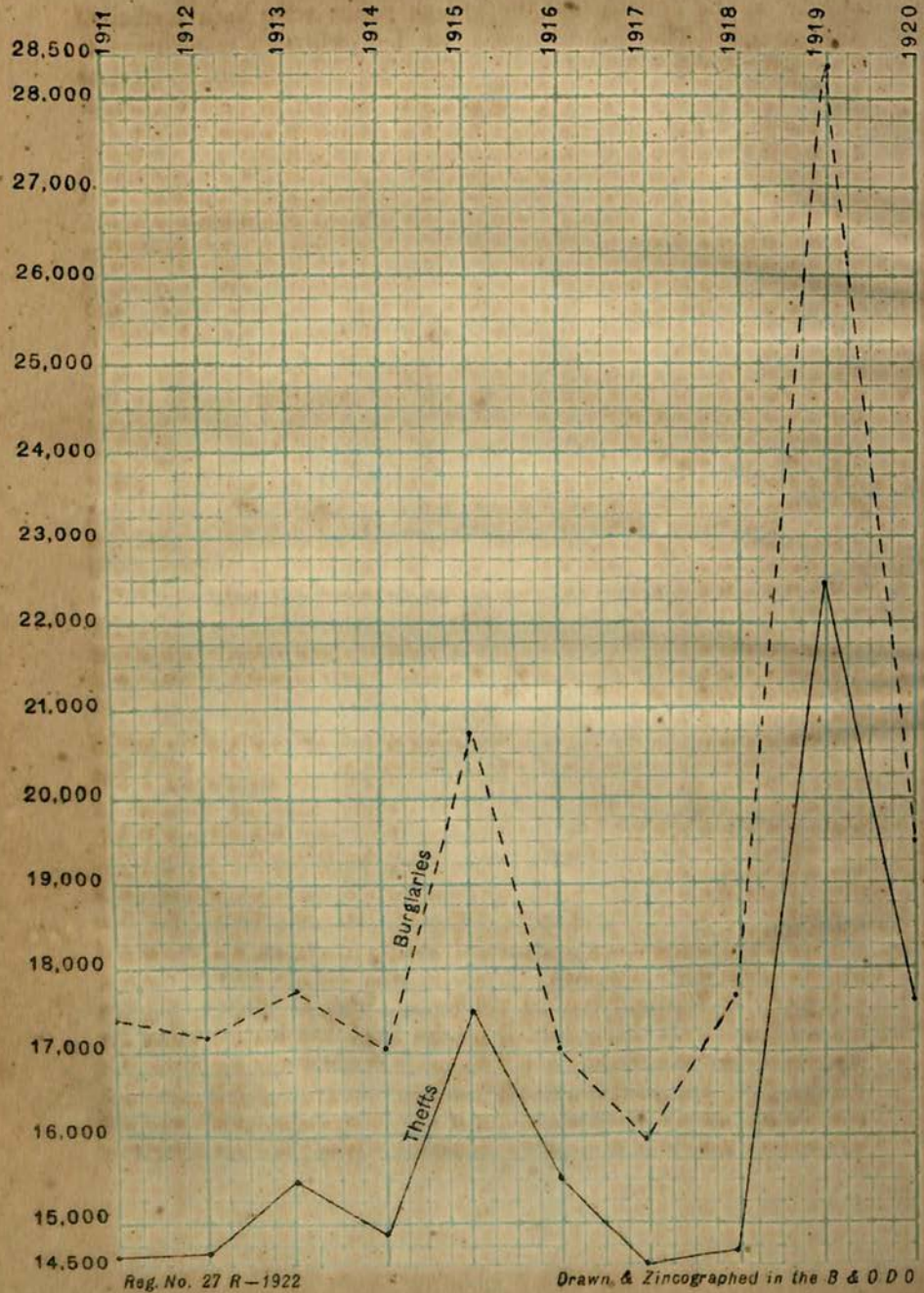
With the exception of a protest made in the Budget debates against expenditure on police buildings, which was subsequently withdrawn, and of the resolution on *begari* referred to in the chapter on the Legislative Council, there have been no references made in Council to the police force proper, except in Council questions. There have however been three separate resolutions on the subject of the Chaukidari force. In the first the abolition of the chaukidari tax in Orissa was recommended, partly because it was a tax, but

The Council and the Police.

Diagram

showing the incidence of Burglaries and Thefts

from 1911 to 1920



Reg. No. 27 R—1922

Drawn & Zincographed in the B & O D O

chiefly on the ground that the village police were both inefficient and corrupt. The resolution was lost, but only by a majority of 4. The attack was renewed in a motion for adjournment to protest against an alleged proposal to enhance the tax to provide for an increment of pay from Rs. 4 to Rs. 5 a month in some Tirhut districts, and was finally pressed home in a resolution, nominally in support of the principle "no taxation without representation" but directed in fact, mainly against the present chaukidari system. These attacks were uncompromising. Not only were chaukidars described as "a lawless body of men who are generally a teror to the humble dwellers in rural areas" and their efficiency vigorously denied, but it was boldy asserted that a salary of as much as three to four rupees a month was greatly in excess of the value of their work, which would be amply rewarded by two rupees. These criticisms are interesting, in that they attack an indigenous system of village police, modified it is true, but rooted in antiquity, of which the cost is defrayed by a tax assessed and collected by bodies of villagers. The total number of chaukidars in the province in 1920 was 67,254, or roughly one chaukidar to every 500 villegers, and the average emoluments per head amounted only to some fifty-five rupees during the year. The necessity for this village watch to supplement a regular police force which at present provides but one officer to every 2,460 persons in the province is obvious.

The chaukidari force attacked.

The chaukidar is the sole representative of law and order in the villages. It is his duty to look up old offenders night by night in their houses, to report unnatural deaths, such as suicides or deaths from snake-bites, and to arrest, if he can, the village thief. He watches crops which are under attachment or land which is the subject of a dispute. Further the chaukidar, no less than the daroga, carries out several useful functions which do not come before the public eye. It is he who reports to the nearest police-station the outbreak of epidemics, such as plague, cholera or small-pox. It is to him that the local vaccinator turns for assistance in recovering his fees or in collecting children for vaccination; and the veterinary assistant surgeon would consider that he had grounds for complaint if the village chaukidar was not at hand to help him in a cattle epidemic. It is the chaukidar's or

The duties of the chaukidar.

daffadar's assistance which enables the process server to identify the subject of a court summons, whether he be a witness, a defendant, or a complainant or accused in a criminal case; and in his weekly attendance at the thana parades it is his duty to report every item of village news likely to interest the sub-inspector. Finally he played a most important part in getting together the first provincial electorate. When it is remembered that the performance of these duties carries with it a remuneration of but three to five rupees a month, it is hardly a matter for surprise that the chaukidar often shirks his work, that he does not spend all his nights on patrol, that he is sometimes in league with local criminals, and that the first information of a crime is often delayed and often inaccurate. The fact remains that he performs a function which no other class of public servant would perform as cheaply, and there is a large minority of chaukidars who do their work with remarkable efficiency.

One alternative to the present system of control proposed in Council was that the chaukidari force should be placed under the complete control of local representative bodies. But the stage of development in Local Self-Government hitherto reached in this province clearly renders this course at present difficult. The alternative of abolishing the force and replacing it by garrisoning rural areas with an organized subordinate constabulary would not only not remove the financial problem of finding their pay, but would accentuate the abuses to which the present system is liable. On the other hand there is every reason to hope that with the extension of the system of representation of the tax-payers and of the elective system in village *panchayats* and in union committees not only will the incidence of taxation be rendered less burdensome than now, but the efficiency of the chaukidar will be increased with the growth of the public spirit fostered by local Self-Government.

The administration of Criminal and Civil Justice.

There is little of interest to report regarding the administration of criminal and civil justice during 1921. The administration of criminal justice was made the subject of attack in the Council, where it was urged that the time has now come when judicial and executive functions should no longer be combined in the person of the District Magistrate, that the subordinate magistracy

should be freed from the control of a magistrate who is also the head of the district police, and that neither the trial of offences nor the control of magistrates who try them should devolve on officers who have any connection with the police or with executive duties. Government in reply accepted the spirit of the resolution, and a committee has been appointed consisting of officials and non-officials to work out a practical scheme. The committee has submitted its report, which is under consideration. In another resolution the extension of the system of trial by jury to every district in the province was recommended. This system was then in force in three districts only, namely, in Patna, Muzaffarpur and Bhagalpur. Government undertook to extend the system after consulting the High Court, and with effect from the 1st January 1922 the trial by jury of certain offences has now been instituted in Saran, Darbhanga, Shahabad, Gaya, Manbhum, Cuttack and Monghyr. A resolution recommending that certain academical qualifications should be prescribed for Honorary Magistrates, and that the selection of these officers should be made from all classes of the people was rejected by the Council.

Two resolutions were moved which affected the administration of Civil Justice. The first drew attention to the difficulties caused to the litigant public in Subdivisions by the necessity of having to come to district headquarters to file suits of the value of more than Rs. 1,000, and urged that one Munsif in every subdivision should be empowered to try suits up to Rs. 2,000. Government pointed out in reply that the remedy for this grievance lay in the hands of the High Court, and the resolutions were withdrawn on the understanding that the speeches made in Council would be brought to the High Court's notice. The other resolution recommended the revision of the Santal Civil Rules. Government pointed out in reply the disadvantage of elaborating the procedure of civil justice for an aboriginal population for whom a simple code of procedure had been intentionally prescribed. Government also undertook to refer alleged defects in the rules to the local officers and to consider any real ground for complaint which might be found to exist. The resolution was then withdrawn.

Prison administration.

The subject of prison administration in India has recently been brought prominently before the public by the appointment of the Jails Committee

whose report was laid before the Government of India in 1920, after the committee had inspected not only prison conditions in India, Burma and the Andamans, but in Great Britain, the United States, Japan, Hongkong and the Philippine Islands. The proposals of the Committee involve radical changes in jail administration and concentrate attention on the reformatory rather than the deterrent aspect of imprisonment. The report is under the consideration of the Government of India in consultation with local Governments, but even when the final orders of the Imperial Government are received years will elapse before effect can be given to many of the recommendations; for to do so would involve heavy expenditure not only on the construction of new jails and similar institutions and on the remodelling of existing jails, but also on higher salaries and the employment of additional staff. Meanwhile the Local Government are taking steps to introduce those reforms which do not involve heavy expenditure such as the constitution of boards of visitors, the religious teaching of prisoners and the concentration of habitual prisoners in special jails. The Government of India are also by gradual stages abolishing the Andamans as a penal settlement, and are thus giving effect to one of the most important proposals of the Committee.

The Jails' Committee.

The Jails Committee's recommendations.

There are in all 64 jails in the province 42 being Subsidiary jails at Subdivisional headquarters, 18 being District jails at District headquarters, and four at Buxar, Hazaribagh, Bhagalpur and Gaya being Central jails. At Monghyr a jail for juvenile prisoners under the age of 20 was established in 1914; a brief description of the institution is given below. The Central jails are intended for the confinement of prisoners sentenced to imprisonment for six months or upwards; at the Subsidiary jails prisoners are only confined when under trial or for a short period after conviction, before their transfer to the District jail.

Jails in Bihar and Orissa.

Reference has been made in the paragraphs on crime to the economic curve which is such a marked feature of criminal statistics in Bihar and Orissa, and this curve is inevitably apparent in the jail statistics. For instance the convict population, which amounted

at the beginning of 1920 to 7,858 fell by the end of the year to 5,638, and the daily average number of prisoners fell from 9,763 in 1919 to 7,845 in 1920. The main reason for this decline was the decrease of no less than 5,000 in the number of cases of "offences against property" which directly reflected the improved agricultural conditions of the province. This decrease in crime continued in the year under review. For the number of convicts admitted from the courts direct, which amounted to nearly 20,000 in 1919 and which fell to 14,421 in 1920 fell again to 12,502 in 1921, while the daily average number of prisoners of all kinds for the three years were 9,763, 7,845 and 5,981 respectively.

The economic curve in jail statistics.

Another interesting feature of the jail statistics in the province in the very high percentage of prisoners undergoing short sentences. The percentage of prisoners undergoing sentences of three months or less was 50.06 in 1918, 64.33 in 1919, 60.24 in 1920; and of the total number of convictions a proportion of no less than 34 per cent. in 1917, of 28 per cent. in 1918, of 37 per cent. in 1919 and of 34 per cent. in 1920 carried sentences not exceeding one month. A very large proportion of these short term convicts are men and women, driven more or less directly by want of food to the commission of petty theft; and the proper treatment of offenders of this class is one of the problems of the administration of justice peculiar to an agricultural country like India. On the one hand there is an obvious danger that the association in jail of these casual offenders with hardened criminals may influence them to adopt a life of crime. But it is not only difficult to punish in any other way persons driven to crime by their poverty, but it is also difficult, if not impossible, at any rate without an amount of expenditure which the province cannot afford, to segregate them in jail from the genuine criminal classes. The Jails Committee have made many suggestions for reducing the number of short term prisoners, as they recognize that the presence of such prisoners render improved reformatory measures difficult.

The preponderance of short term convicts.

Another problem of jail administration is the treatment of female convicts. The total number of these is small, the daily average number amounting only to 195 in 1919, to 162 in 1920 and

to 126 in 1921, and more than half of the annual total are normally sentenced to a term of one month's imprisonment or less. These figures indicate clearly that most of these women are driven to crime by destitution, and it is clearly advisable that they should while in jail be carefully supervised and be exposed as little as possible to contact with hardened criminals of their own sex. Yet in most of the district jails there is only one female warder, and the Inspector-General of Prisons drew attention in his Annual Report of 1920 to the fact that there is only one jail in the province (at Bhagalpur) which allows of effective separation of female casuals from habituals.

Female convicts.

Considerable progress has already been made in the treatment of youthful offenders. In 1914 the District Jail at Monghyr was converted into a Juvenile Jail. All juvenile offenders of 15 to 20 years of age sentenced to terms of imprisonment of three months or more are transferred to this jail, unless they have already undergone detention in a Reformatory School or in a Juvenile Jail. They are given industrial training in carpentry, tinsmithy, weaving or gardening. They are given elementary lessons in arithmetic: they are drilled and allowed to play games, and they are under the constant personal supervision of teachers and artizan instructors. Prisoners are divided into three grades, ordinary, special and penal. All prisoners start in the ordinary grade, and those whose conduct is good are promoted to the special grade, which means the grant of certain privileges in the matter of food, clothing, interviews, letters and luxuries. A committee of visitors, including four non-officials, with the District Magistrate as Chairman, inspects the jail once a month, and it is the duty of the committee to recommend special cases to government for mercy, and to concert measures for sending home prisoners due for release and for finding employment for them. They may also recommend the discharge on license of any youth who has undergone not less than one year's imprisonment, if they consider he is likely to lead a life of industry and if they can find any society or person willing to exercise supervision to provide work for him. There were 772 youthful offenders admitted to jail this year, of whom 415 were sent to the Juvenile Jail. As the percentage of youthful offenders who can read and write is usually well under 3 per cent. and as a large proportion

Youthful offenders—The Monghyr Juvenile Jail.

(rather under 20 per cent.) are orphans, the Juvenile Jail had a responsible and difficult task to perform. The main difficulties in the successful working of the system are, first, the shortness of many of the sentences passed, which allow no time for the reformation of the prisoners, and secondly the absence of an effective organization to look after the boys on their release from jail. These two factors are partly responsible for the fact that more than 8 per cent. of the youthful offenders sentenced every year to imprisonment have previous convictions against them.

Another interesting institution for the reformation of youthful offenders is the Reformatory School at Hazaribagh. This school is intended for Indian boys of under 15 years of age convicted of offences punishable with transportation or imprisonment. Boys are kept till they are 18 years old, and the school is run as far as possible on boarding school lines, the education given being the lower primary standard, and the institution being under the supervision of the Director of Public Instruction. There is a school workshop, which is at present being reconstructed. Trades are taught, including motor car repairing, and every boy is given a turn in the kitchen. A committee inspects the school, and several changes have recently been introduced with a view to converting the institution from a penitentiary into a school. That it is doing good work is proved by the result of enquiries into the subsequent careers of the boys. There were 419 boys in the school last year and of the 200 boys who have left during the past two years 160 have been found to be leading honest lives. Boys are released on license as apprentices under the supervision of selected private employers. There were 19 boys on license in April 1921.

The Reformatory School.

In all the jails in the province convicts sentenced to hard labour who are physically fit for it are employed on useful work. In the Buxar Jail tent-making, tailoring and weaving are the main employments, and other employments elsewhere include iron-work, carpentry and printing. Some idea is given of the extent of the outturn of jail manufactures by the fact that in 1920 the Buxar Jail supplied 86 thousand chaukidari and 35 thousand police uniforms, nearly 34 thousand articles of prison clothing, 16 thousand uniforms of other types, and wove more than 145 thousand yards of cloth of all kinds. The

Jail manufactures.

maximum outturn of the Bhagalpur jail is 60,000 blankets a year. The re-organization of jail industries is now receiving attention, as statistics indicate that concentration in Central Jails gives better results than District Jail work.

The statistics of mortality in jails have fluctuated considerably in the past ten years. This is illustrated in the table below :—

	Ratio of deaths per mille of prisoners.	Ratio of deaths among the free population.
1912	17·5	31·0
1913	19·6	29·1
1914	16·0	28·3
1915	25·0	32 2
1916	32·8	32·8
1917	32·8	35·2
1918	63·4	56·7
1919	43·6	40·0
1920	27·0	30·9
1921	30·9	(Not available.)

Mortality in Jails.

It will be noticed that previous to the year 1915 the death rate among prisoners was considerably lower than among the free population of the province, that jail mortality rose by over 8 per mille in 1915, and in 1916 rose to the same level as that of the free population. In 1918 and 1919 it exceeded the ratio of deaths of the free population; and it was not till 1920 that it again fell below that ratio. This serious increase in sickness among prisoners is attributable to various causes, for many of which remedies have been applied. The heavy mortality in 1918 was due to the influenza epidemic of that year, which was aggravated in the inevitable difficulty of segregating the sick. A tubercular ward has been constructed at the Bhagalpur jail and a proposal to convert part of the Hazaribagh jail into a

permanent central segregation ward is under consideration. In order to facilitate medical control prisoners have latterly been concentrated to a greater extent in large Central Jails in charge of whole-time Superintendents. New hospital wards have in some cases been constructed. Systematic enquiries have been made into specific diseases and considerable success has attended the efforts made for instance to obtain an early diagnosis of the symptoms of dysentery and of hookworm infection. The improvement in the general health of prisoners within the last two years is undoubtedly due in part to such remedial measures as these. At the same time the coincidence of a steady increase in prison mortality with the opening years of the war, when the great majority of the Indian Medical Service were called away to military duty, and subsequent improvement following their return to duty is noticeable.

Jail administration in the Council Debates.

Jail administration has attracted some attention in the Legislative Council. One resolution referred to the treatment of Muhammadan prisoners during the month of *Ramzan*. Government were unable to accept this recommendation *in toto* or to except Muhammadan prisoners entirely from hard labour during this period. To do so would be prejudicial to jail discipline and would result in placing the criminal Muhammadan population in a better position than the honest poor outside the jail who are obliged to carry out their daily work in spite of the fast. Government however, undertook to make special arrangements for the meals of such prisoners as wished to keep the fast and directed jail officers to pay special attention to their physical condition during the period and to make their tasks proportionate to their strength. At the third session a resolution was moved recommending that "political" prisoners including non-co-operators should be treated as are similar prisoners in England and also should have the same facilities as European prisoners in India. The resolution showed some ignorance of the treatment of political prisoners in England, who though granted some concessions in regard to food and clothing are seldom exempted from labour, and also overlooked the fact that European prisoners in Indian Jails do not receive any preferential treatment but are together with Indians living in European style, given food and clothing of the kind to which they have been accustomed. Government however accepted the spirit of the

resolution, and have recently ordered that, if so directed by the trying court, persons convicted of offences under the Criminal Law Amendment Act or under the sections dealing with sedition in the Indian Penal Code such a sections 129-A., and 153-A., shall receive certain concessions; they have been permitted for instance to supplement the jail diet by food purchased or supplied from outside the jail, to receive books and newspapers, to supply their own bedding and to receive more frequent visits from their friends than those allowed under the Jail Code. As the majority of the prisoners are sentenced to simple imprisonment, they are under no liability to labour, and their treatment compares favourably with that accorded to "passive resisters" or similar political prisoners in England. In granting these concessions care has been taken to differentiate between those who have committed political offences from a belief, however, mistaken it may be, in the justice of their cause and those whose conduct has resulted in violence or the destruction of property or who have been guilty of actual criminal intimidation or similar offences.

Education.

The illiteracy of the masses.

Apart from the administration of justice and the maintenance of law and order the most important and difficult social problem with which Government is faced is that of education, which is now a transferred subject in charge of a Minister. In the last Report prepared by Professor Rushbrook Williams ("India in 1920") it is stated that only 2.36 per cent. of the total population of British India is under instruction in educational institutions, this figure being made up of 5.6 per cent. of the male and 1.2 per cent. of the female population. In Bihar and Orissa the percentage is even lower, there being in March 1921 only 4.27 per cent. of the male, and 0.65 per cent. of the female, or 2.43 per cent. of the total population of the province under instruction in both public and private educational institutions. This illiteracy of the masses is, as has been mentioned in the first chapter, a factor of immense political importance in India. Political progress depends to a large degree on the growth of the electorate. But an illiterate and widely scattered electorate, incapable for the most part of reading the newspapers and cut off from any knowledge of the proceedings of Council except what it

The influence of this illiteracy on political progress.

can glean from bazar rumour or from rare and often contradictory speeches or rival candidates for election, is a serious obstacle in the way of a genuine democracy.

Illiteracy the cause of many of the hardships of the cultivator.

Many of the daily hardships of the cultivating classes may also be directly ascribed to illiteracy. The cultivator is and has long been at the mercy of almost every literate man with whom he is brought into contact. The bribing of subordinates to perform the most elementary duties is common and there are many who cheat him with his money in their pockets. The grant of incorrect rent-receipts, the forgery of hand notes, account books and deeds of transfer, the insertion of false entries in legal documents, the fabdication of false evidence and all the fraud and chicanery practised in and about the courts of Justice, are only rendered possible by the illiteracy and the almost incredible credulity of the Indian peasant; and though the cultivator's poverty is largely responsible for the insanitary conditions in which he lives and hence for the disease and epidemics which ravage India, the extension of literacy would without doubt facilitate the education of the masses in the value of elementary methods of prevention and cure of disease both of men and animals, and would thus be of incalculable economic value.

Progress made in primary education in Bihar and Orissa.

These obvious considerations have not been overlooked by Government. Ever since 1854 when special stress was laid by Government on the importance of elementary education increasing attention has been devoted to that object. There is no space in this volume to describe the development of primary education; but in the six years which preceded 1919 the total number of primary schools in India rose from 123,000 to 150,000 and of pupils from 4.9 to 5.9 millions, while in Bihar and Orissa primary schools rose from 23,408 in 1914-15 to 25,793 in 1919-20, and pupils increased in the same period from 650,426 to 781,446. When it is remembered that these were years of exceptional economic stress and financial difficulty owing to the Great War, an increase of over 2,000 primary schools and of over 68,000 pupils is no small achievement. Expenditure on primary education increased by half in that period. So the amount spent from public funds on primary

schools rose from Rs. 12,35,235 to Rs. 18,39,473. In 1920-21 this figure increased again to Rs. 19,23,456.

There has, it is true, been a pronounced decrease in the number of primary schools and of pupils in the last year. Primary schools of all classes for boys and girls decreased by 553 or 2.1 per cent., and pupils by 11,700 or 1.6 per cent. between 1st April 1920 and 31st March 1921. But this decrease is due, not to any slackening of activity on the part either of Government or of Local Bodies, but to economic factors which year by year oppose themselves with more uncompromising strength against the development of primary education. The decrease is, as the Director of Public Instruction has shown in his report, confined to unaided schools, and is probably mainly due to the rise in prices which has rendered it impossible for teachers in many cases to conduct their schools without help from public funds. The effects of the non-co-operation movement, which were mainly felt in the sphere of secondary and college education are dealt with in a subsequent paragraph.

The set-back of 1920-21 due to economic causes.

But the amount of money available from these funds is rapidly reaching its limit, and so is the number of parents who are prepared to pay even the modest fees required to give their children elementary education. Some idea of the gigantic cost involved in even the most limited educational schemes may be gathered from the calculation that the cost of improving the admittedly inadequate standard of teachers' pay in primary schools to the standard already in force in a neighbouring province would amount to an additional 53 lakhs of rupees, even if no allowance is made for any increase in the number of teachers. The obvious remedy is an increase in fees, but an enquiry made in 1920-21 showed that already a very large number of boys are kept away from school owing to the inability of their parents to pay even the very small sums now charged. It would seem to be the case that the children of most of the parents who can afford to pay fees and are willing to do so are already provided for. There remain the large number whose parents are poor or do not appreciate the advantages of education. The first class cannot pay fees while the second will only send their children to school if compelled to do so; and compulsion can scarcely be applied so long as fees are charged.

The financial problem of free primary education.

Provision has recently been made under the Primary Education Act for the introduction by Municipalities and Union Committees of compulsory primary education within the areas under their jurisdiction. But so far the Ranchi Municipality alone has taken advantage of this Act. The reluctance of other Municipalities to follow the example of Ranchi is due undoubtedly in great part to their fear of the odium which would follow the imposition of an education cess. There is also possibly in many quarters a feeling that the extension of education may make it difficult to obtain menial and other labour at the present rates.

The Bihar and Orissa Primary Education Act.

The fact that most of the professions open to educated young men in India are ready overfilled illustrates another markable feature in the statistics of Education in India. Through the percentage of literacy and of elementary primary education is so low compared with that of any Western nation, the percentage of youths in secondary schools compares favourably with that of Great Britian. In 1920 in the whole of India 0.5 and in Great Britain 0.6 per cent. of the population was undergoing secondary education; and, as female education is confined in India to an almost negligible quantity, this means that of the male population some 0.9 per cent. or .3 per cent. *more* than in Great Britain was in 1920 in process of being educated in the higher branches of learning. Again in University education in 1920 the Indian percentage was 0.027 per cent, while the corresponding percentage in England and Wales was 0.054. In Bihar and Orissa the percentage of youths undergoing secondary education to the total population is, 18 and of those undergoing University education is .07.

The disproportionate development of Secondary and University Education.

This uneven distribution of educational advance, which has formed the basis of so much adverse criticism, is, as the authors of the Report on Indian Constitutional Reforms have pointed out, largely due to the insistent demand from a limited class, particularly of the higher castes of Hindus, for an education which would fit them for the continuance under British rule of their hereditary careers in the administrative body of India; and to the same demand is due the domination of education in India to a degree unknown in

any other country by the examination system. The supply of education has tended to follow the most pressing demand, while the education of the masses has till more recent times suffered from the indifference which these masses have themselves displayed. This process has led to the evolution of an *intelligentsia* as large as can be found in Western countries, while social and economic conditions in India have not developed either with the same speed or on the same western lines. This is partly due to the barriers of religion and caste. For instance in this province, though there are hundreds of high caste Hindus issuing every year from schools and colleges, there are comparatively few who are not prevented by scruples of caste from becoming doctors or veterinary surgeons. This is partly due to the lack of professional and technical instruction, which again may be ascribed in some degree to the absence till recent times of any extensive demand by high caste Hindus or by Muhammadans for a commercial or industrial career. It is partly also due to the shyness of Indian capital which, with a timidity born of ignorance, has in the past contributed but little towards industrial development. This wide gap between the educated minority and the illiterate majority is, as has been noticed above, responsible for many of the political difficulties of the present age. Secondary and University education on western lines has undoubtedly fostered the rapid growth of a nationalist spirit and of democratic ideals among the Indian *intelligentsia*. But the same classes find the limited careers open to them an inadequate outlet for their enlarged ambitions, while the realization of the national aim of Self-Government is retarded by the political incompetence of the masses, and by the divergence of outlook and lack of common interests which separate the leaders from the men they lead.

The gap between the intelligentsia and the uneducated masses.

The number of secondary schools for boys and girls rose from 437 in 1912, when the province started to 561 in 1919-20; and in the same period the number of pupils has risen from 53,170 to 74,187, and expenditure from public funds, *i.e.*, including Provincial Revenues, District Board and Municipal funds, but excluding fees, endowments and subscriptions, from about Rs. 2½ lakhs to more than 8 lakhs. In the last financial year, from 1st April 1920 to

The progress of Secondary Education in Bihar and Orissa.

31st March 1921, there has been an increase of three only in schools and a heavy decrease of nearly 16 per cent. in pupils. The chief cause of this decline is undoubtedly political and is dealt with below in the paragraph on non-co-operation. Economic causes may be responsible for a small percentage of the decrease, and it is more than likely that a prevalent impression that the Matriculation Standard is lower in the Calcutta than it is in the Patna University has caused an appreciable migration to schools in Bengal.

The need for improving teacher's salaries.

An important event during the year has been the prescription of a revised scale of fees in Government and Aided High and Middle English Schools with the object of improving the pay of aided school teachers from the proceeds of the increase. The underpayment and comparative lack of professional qualifications in the teaching classes has for long been a recognized defect in the Indian educational system; and it is no less acutely felt in Bihar and Orissa than elsewhere. The statistics given in the 1920-21 Education Report show that in schools for Indians less than one teacher of the Vernacular in three is trained, and less than one in fifteen of Anglo-Vernacular teachers and teachers of classical languages; while only 35 per cent. of the teachers in Anglo-Vernacular schools possess a degree. The salaries of teachers in privately-managed schools are particularly poor, ranging as they do from Rs. 100 a month, which is the ordinary salary of the headmaster of a High School, to Rs 2 a month which is the minimum stipend payable to teacher in a lower primary school, in addition to such fees as he can realize from the pupils. That such salaries are inadequate to secure the permanent services of a satisfactory class of teacher is difficult to deny, and it is notorious that the junior teachers in secondary schools are as often as not using their posts as a temporary refuge while they study for the bar or for Government service.

The School Leaving Certificate Examination.

Another important new development has been the holding for the first time of a School Leaving Certificate Examination for High Schools. The object of this scheme is the institution of special courses in secondary schools, designed to prepare students for commercial or clerical careers and for further instruction in special institutions. Provision is made in the case of students reading for this certificate for a record of progress in school as well as for a public examination, and the record is

consulted at the time of the examination in the case of those candidates who fail in one subject only. While it is recognized that further provision for vocational subjects should be made as soon as possible, there is the usual difficulty in finding the necessary funds. Middle Vernacular schools are reported to have grown in popularity owing to the introduction of a similar Leaving Certificate Examination.

The University.

The most important event of the year for the Patna University has been the refusal of the Government of India to make any further contribution towards the establishment of a central University. This has necessitated a reconsideration of the whole scheme, and Government have announced their intention of consulting public opinion on a proposal of the Director of Public Instruction that the University should be located in the neighbourhood of the Patna College instead of on the site beyond the new city which had been originally chosen. In the meantime the Patna college has by a curious anomaly made little progress owing to the long pending consideration of the Central University Scheme, while the external colleges at Cuttack, Muzaffarpur, Bhagalpur and Hazaribagh have been greatly improved. New buildings for the first three of these are all nearly finished. The other chief event of interest affecting the University is the abolition of the age limit for Matriculation. This is undoubtedly a popular measure, as is shown by the interest taken in the matter in Council. A further reference to this change is given in the summary of Council debates below.

Arts Colleges.

There has been a serious decline in the number of students in Arts Colleges in the last three years, the total having fallen from 2,914 in 1918-19 to 2,591 in 1919-20 and again to 2,269 this year. This fall of more than 22 per cent. in three years is probably due to four causes. First, economic conditions were unfavourable both last year and this. Secondly, the impression that the standard required for a pass is lower in Calcutta University than at Patna, has caused migration to Bengal. At the same time it is to be noted that the percentage of passes at the Patna Matriculation is rising steadily, and that in Chota Nagpur, which is in some respects the most backward Division of the Province, the percentage of passes this year was as high as 75.4. Thirdly, a new Regulation was sanctioned in June 1920, permitting students who have failed twice at the Intermediate

Examination to appear on two subsequent occasions without further attendance at lectures, and this has resulted in reducing the number of enrolled students. This was particularly noticeable in the Bihar National College. The fourth and perhaps the most important cause during the last year is the non-co-operation movement.

Female education.

As the question of female education is one of those which the Education Committee is considering it need only be briefly dealt with this year. The number of public institutions for Indian girls has risen from 1,446 in 1912 to 2,682 this year and the number of pupils in them from 35,785 to 64,295. Direct expenditure has increased from Rs. 2,27,620 to Rs. 5,52,324. Economic distress combined with the effect which political agitation has produced on a demand for the education of girls which has never been very strong, has resulted this year in a reduction of 3,186 in the total number of girls at school in all classes of institution, *i.e.*, of about 2.8 per cent. A curious feature of the statistics of female education is that over 41 per cent. of the girls at school in this province are reading in boys' schools, the great majority of them in lower primary schools, in which there are no women teachers. Almost half the girls must, therefore, be leaving school without any instruction in such useful arts as needlework, and with no distinctively feminine education. The only remedy for this is to open additional training classes for women teachers. In the last financial year, there were 134 students in training classes. A difficulty is reported by the Lady Principal of the Badshah Nawab Razvi Training College as regards her Muhammadan passed students who are said to have found difficulty in obtaining employment in Bihar and Orissa. Five such teachers are reported to have gone to Bengal and four more to wish to do so, while Hindu teachers on the other hand readily find employment locally. No events of particular importance are reported, and indeed there can be little of importance to record regarding the education of women in a province in which only .64 per cent. of the female population is undergoing instruction.

Debates on Education in the Council.

The subject of Education has roused keener interest and has been responsible for more resolutions in Council than any other question of public policy. But as a committee has been appointed in compliance with the Council's recommendations and

is still sitting, the terms of reference to which include the consideration of primary and secondary school curricula, the pay of teachers, the general question of the development of primary education and the question of religious and moral instruction in primary and secondary schools, that is, to say practically the whole field of primary and secondary educational policy, a brief summary only need be given in this volume of the debates on the various resolutions, sufficient to indicate the main points to which attention has been drawn in Council. Primary and secondary education formed the subject of most of the resolutions, and criticism was directed against many alleged defects in the past policy of Government. One of these was the absence from the school curricula of distinctively religious training. A resolution was moved for the appointment of a committee to decide the composition by Government of religious text-books, but was withdrawn on the understanding that the question was being considered by the larger committee.

Religious training.

The subject of economy in buildings was also raised, and a separate resolution carried recommending that building regulations should be dispensed with as far as possible in the case of village schools. Steps have been taken by the Government to make this possible by alterations in the rules.

Building Regulations.

Attention was drawn to the need for the improvement of the curricula of girls' schools in order to adapt them more closely to the social needs of Indian women, for the reduction in the number of subjects at present prescribed in boys' schools, for the improvement of training schools, and the abolition of corporal punishment. The need for increased expenditure on primary education both to extend its scope and to improve the pay of its staff were also emphasized.

Miscellaneous criticisms.

Considerable emphasis was laid on the need for special training in various directions. In the first place the opening of Agricultural and Artizan classes in all primary schools together with the utilization of school compounds for practical agricultural demonstration by village *gurus* was recommended. The resolution was lost when it was pointed out that Government would be unable

Agricultural Training in primary schools.

to provide teachers and that the ordinary village school master could not in most cases teach his pupils more than their parents already knew about agriculture. The subject was, however, again raised in a resolution recommending the institution of agricultural training as a compulsory subject in all Middle Vernacular and English schools, and the creation of small farms for demonstration purposes attached to all such schools. The Minister pointed out the difficulty of making such a subject compulsory, for instance, to the sons of the shopkeeping and industrial classes, and the impossibility of finding money for the farms or for training teachers. The resolution was withdrawn.

Vocational Training.

An interesting debate followed the moving of a resolution for the development of vocational training. The mover, while admitting that a liberal education in arts and science is the soundest foundation for a University Education, urged that vocational training should be given in schools before the University standard is reached, and that Universities should provide specialized courses for training experts. Comments were made on the absence of a provincial Medical Institute and of extended facilities for training in engineering, mining architecture, commerce and industry. The Minister was able to point in his reply to the facilities already provided for technical instruction, to which a reference has already been made in dealing with the Department of Industries. University courses in commerce have, for instance, been prescribed. There are manual training classes in the Patna New College, the Bhagalpur and Ranchi Zila Schools, the Ravenshaw Collegiate School and the Balasore Christian High School; office and book-keeping classes in the C.M.S. Mission school in Bhagalpur; physics and chemistry classes in the Perrin Memorial High School, and drawing classes in other schools. A warning note was sounded in the course of the debate against the blind use of "vocational training" as a catchword, and it was pointed out that vocational education cannot rightly be regarded as an alternative to ordinary general education. It is either additional to it or at the most alternative to part of it Secondly it implies the creation of a new staff and thirdly, in the early stages, as much attention must be paid to the training of teachers as to the provision of schools. A committee is being appointed to consider the whole subject.

There was an instructive debate on a resolution which recommended the conversion of at least six Middle English schools into Government institutions. Government's recent policy has been to rely as far as possible on private enterprise in secondary education, helped by Government grants and subject to a certain control. This policy leaves Government time to concentrate attention on primary education and avoids a very real danger of over-interference by Government in the more advanced type of educational institution, the management of which properly lies within the sphere of local control. Sufficient control can be exercised over secondary schools through properly constituted managing committees which ensure the correct administration of Government grants, through the prescription of a minimum staff, with minimum qualifications and pay and through efficient inspection. A few Government secondary schools have at the same time been established as models. The resolution was withdrawn.

Government control over Secondary schools.

Reference has already been made in the chapter on the Legislative Council to the resolution which was passed, and to which subsequent effect has been given, for the creation of 5 scholarships, one for each district of Chota Nagpur, for non-Christian students, and of ten free studentships for aboriginal matriculates and under-graduates of all classes. A resolution in favour of the institution of an Art and Science College at Ranchi was lost owing to the financial difficulties in the way. The debate elicited some interesting statistics of the aboriginal students in Chota Nagpur Division. There are no less than 37,142 such students of whom 18,080 or nearly half are Christians.

Scholarships for Aborigines.

Unfortunately, in spite of the interest taken in and the support given to education in Council, the whole progress of education has received a serious set-back during the first year of the new *regime* owing to the non-co-operation movement. The effects of this movement were first seriously felt in November-December 1920, though outside the Patna and Tirhut Divisions withdrawals from schools and college were not numerous. A few "national" schools were started,

The effects of the Non-co-operation Movement.

and there was a serious strike at the Bihar School of Engineering. A second wave of non-co-operation returned late in January 1921, and some 6 per cent. of College students withdrew before the end of February. By the end of March the effects of the movement had made themselves felt throughout the province. As might be expected, the effects have been most serious in colleges and in secondary schools. The decrease of pupils in secondary schools in the end of March 1921, as compared with those of March 1920, amounted to 11 831 or nearly 16 per cent., and in middle English Schools alone it was over 9 per cent. This serious decline must be ascribed almost entirely to political causes. For it was hardly perceptible in Chota Nagpur and Orissa, where the non-co-operation movement has so far been least successful, and was most marked in Tirhut, Patna and Bhagalpur where the withdrawals amounted to roughly 7,000, 3,800 and 1,000 respectively. Five High Schools were nationalized and a member of "national" schools were established. In the colleges the number of students, which had increased from 2,905 in March 1920 to 3,265 on the 1st of November 1920, fell by the end of March 1921 to 2,548 and by the 1st of November had only risen to 2,610, *i.e.*, to a figure which is less by 655 or 20 per cent. than the total of a year before. In primary schools pupils showed a decrease in March 1921 of 1,700, or 1.6 per cent. on the figures of the previous year. In this case however the decrease occurred entirely in unaided schools and in lower not in upper primary schools, and the fall in scholars was accompanied by a large fall in the number of schools. While therefore it is unsafe to dogmatize, it is unlikely that political reasons contributed as much to the decline either of lower primary schools or scholars, as the fact that owing to the rise in prices teachers found it in many cases impossible to conduct their schools without help from public funds, with the result that they were disbanded. To the non-co-operation and Khilafat movements may however be partly ascribed a fall of 6,368 in the number of Muhammadan pupils of primary schools, as this fall was accompanied by a small increase from 9,820 to 10,253 in the number of Muhammadan pupils in private institutions. A decline of 1,318 in the number of hostel boarders was probably due to political

Mainly confined to colleges and secondary schools.

The decline in primary schools may be due to economic rather than political causes.

factors, which were also responsible for a certain number of "strikes" and for an increase in the difficulties experienced in maintaining discipline. A case of attempted arson at the Ravenshaw College, the burning of the Khurda High School and the fire in the District Inspector's Office at Cuttack are all sinister indications of political agitation. By the end of the year, however, in spite of the recrudescence of political agitation which followed the arrival of the Prince of Wales in India, the attempted boycott of schools and colleges had made no appreciable progress. What will be the future of the "national" schools it is still impossible to foresee.

Breaches of discipline.

The last social problem with which this chapter deals is that of excise. This has now become a transferred subject, and considerable prominence has been given this year to the excise question both in the Legislative Council and by active propaganda throughout the province. A resolution, to which reference has already been made in Chapter II, was moved in the Council's first session recommending the total abolition within one year of the sale, manufacture and consumption of liquors and intoxicating drugs, except for medicinal purposes, in so far as they are controlled by Government; and though this resolution was lost, and the excise grant was, after some opposition, carried in the Council, a Committee has subsequently been appointed to consider the practicability of total prohibition, and if this course is not recommended to consider various other changes in Government's excise policy which may be held to be desirable.

Excise.

As the speeches made in Council indicate the prevalence of some misunderstanding of Government's excise policy a useful purpose may be served by summarising a few of the points made by the Commissioner of Excise during the debates. In the first place the increase which has taken place in the provincial excise revenue does not mean that there has been an increase in the consumption of country spirit. What has actually happened is that the price of country spirit has been raised and that consumption has decreased. Secondly it does not follow from the fact that an increase has taken place in the consumption of distillery country spirit that there has been an increase in the consumption of *all* country spirit. There has been an increase of about 200,000 gallons in the period

Government's Excise Policy.

1912-13 to 1919-20 in the amount of distillery country spirit sold. But the explanation of this increase is that during this period it has been the policy of Government to decrease the area served by outstills, over which no control can be exercised except by the limitation of their number, and to increase the area served by shops, in which the price, quality, quantity and strength of the liquor sold can be regulated. In pursuance of this policy there has been a reduction of 305 outstills, the place of which has been taken by 69 shops only. The actual effect of this change can be seen by examining the statistics of the 13 districts which during that period have had no outstills in them. In these districts while revenue has increased by nearly 10½ lakhs or about 30 per cent. consumption has decreased by 16 per cent. In fact an increase in revenue accompanied by a fall in consumption has been the result of Government's policy of controlling the quantity and quality of country spirit sold and of raising the price. The same policy has been successfully followed in the control of drugs. In the same period 1912-13 to 1919-20, there has been a fall of 28 per cent. in the consumption of *ganja*, and the duty has been raised by about 300 per cent. The consumption of opium has decreased by 21 per cent. while the revenue from its sale has increased by 62 per cent. Government may therefore fairly claim that they have encouraged temperance though they have not aimed at total prohibition.

The so-called "temperance movement" in Bihar and Orissa is in fact of very recent growth and has so far been marked more by the characteristics of a political than those of a social campaign. It first appeared at the end of 1920, *i.e.*, at the time when non-co-operation first began to spread in the schools and colleges, and was at once marked by aggressive tactics, which usually took the form of attempts, at first by suasion and then by threats and intimidation, to prevent liquor vendors from taking settlement of the shops. Police had to be called in by District Officers to keep hostile crowds from the auction rooms, and liquor shops were subsequently picketted, in many cases by youths of the student class, assisted often by *doms* and hired roughs. Numerous, cases of assault, mischief and criminal intimidation of vendors and consumers have occurred

The campaign against liquor in 1921.

during the year. Numbers of shops have been burnt down and others looted. Social boycott has been effectively and often ruthlessly employed. For instance obstruction was offered to the funeral rites of a vendor in Ranchi; and Muhammadans refused to carry to burial the dead bodies of an excise peon in Patna, of a vendor's servant and of an Excise Sub-Inspector's child in Gaya, and of a vendor's relation in the Santal Parganas. Aggressive tactics were continued throughout the year though with varying intensity in different districts. A few of the more serious cases which occurred late in the year were an assault on two Excise Sub-Inspectors in the Santal Parganas, two arson cases and a serious assault on a vendor in Saran in November, and finally the removal of the dead body of a distillery proprietor at Ranchi from its grave and the mutilation of the head of the corpse.

These are not the methods of social reformers. The movement initiated in the Council was doubtless prompted by genuine feeling, and it is an undoubted fact that there are in the province large numbers both of Hindus and of Muhammadans of the upper classes by whom the consumption of alcohol is condemned both on religious grounds and by the social tradition of centuries. But the great majority of the active workers in the districts appear to have been prompted by no higher motive than the desire to embarrass Government by cutting off one of its sources of revenue. To attain this object not only were such violent or quasi-violent methods used as those described above, but a false impression was undoubtedly encouraged among the ignorant masses in many parts of the province that their temporary abstinence, by bringing *Swaraj* nearer, would hasten the time when excise fees would be abolished and liquor would be free and they were allowed to practise illicit distillation. These propositions are illustrated not only by the great increase in illicit distillation actually discovered and reported during 1921, but also by other significant features of the statistics. Thus there was an increase of 57 per cent. over last year in the cases of illicit distillation reported in Ranchi up to September last, and the same feature re-appears in several districts. Further, it is noticeable that a decrease in the activity of the agitators has almost invariably been followed by an

The movement hitherto mainly political in character.

immediate rush to the liquor shops. The fall in the consumption of country spirit, which amounted to 52 per cent. in April, fell to 38 per cent. in May, to 18 per cent. in June, and to 4 per cent. only in July; and in three districts (Patna, Shahabad and Manbhum) there was in December last an actual increase in the consumption of country spirit over the figures of December 1920. The Patna statistics are particularly significant. In January this year and again in February the consumption of country spirit was less by a half than it had been in those months in 1920. But in December last consumption was over 6 per cent. greater than in December 1920. The only possible explanation of these variations is that owing to the cessation of violent methods the public were left free to follow their own inclinations, and that these inclinations were not towards temperance.

It is also significant that the decrease in the consumption of country spirit in the Santal Parganas was accompanied in July by a 50 per cent. increase in the consumption of foreign liquor, and that the consumption of drugs has this year shown a marked increase in several districts. Thus in Gaya a decrease of 47 per cent. in the consumption of country spirit in the first 3 months of 1921 was accompanied by an increase of about 6 per cent. in the consumption of *ganja* and of *bhang*; in Champaran in the same period a still larger decrease in the consumption of country spirit was accompanied by a 9 per cent. increase of *ganja*; and in Manbhum a 2 per cent. decrease in the consumption of country spirit was more than balanced later in the year by an increase of 19 per cent. in that of *ganja* and of 27 per cent. in that of opium.

An increase in the consumption of drugs some districts.

It cannot however be denied that if the main object of the movement was to embarras Government by cutting off a source of revenue, that object has been temporarily attained. A decrease in the consumption of country spirit, which amounted in the calendar year to about 26 per cent., has been accompanied by a fall of about 28 per cent. in the combined revenue from duty and license fees on all forms of liquor. A fall in consumption, both of liquor and of drugs, was expected by Government, who had enhanced the maximum price of country spirit by about 25 per cent. besides making still larger increases in the duty on drugs. But a decrease

in revenue was not budgeted for; and the result of a fall of nearly 26 lakhs in the revenue from January to December has been, as was mentioned in Chapter III, to convert a surplus into a deficit budget.

CHAPTER VI.

Local Self-Government and Public Health.

It is important to emphasize the nature and extent of the change which has taken place in the administration of Local Self-Government in Bihar and Orissa since the publication of the Report on Indian Constitutional Reforms in 1918, and more particularly in this the first year of the Reform Scheme. It was pointed out by the authors of the Report, and was admitted in the important Resolution of the Government of India on Local Self-Government which was issued in the same year, that, though it was the avowed object of Local Self-Government to train the people at large in the management of their own affairs, and thus to implant in the people the administrative experience and sense of civic responsibility which was essential to the realization of responsible Government in India, the attainment of this object had been impeded by the control which had hitherto been exercised over local bodies both from within and from without. The sphere of their activities was indeed comprehensive. Rural education, dispensaries, sanitation, country roads, bridges, water-supply, drainage, veterinary work, cattle fairs, ferries and pounds were all matters administered by District and Local Boards and by Municipalities. Nevertheless Local Self-Government was more apparent than real. In this province in 1918 there was only one elected non-official chairman of a District Board. In all other cases the District Officers were the nominated chairmen. In Local Boards there were only 6 elected non-official as compared with 26 elected official and 15 nominated official chairmen; and in Municipalities while there were 31 nominated and 5 elected official chairmen, there were only 19 non-official chairmen, of whom 2 were nominated. Government servants thus exercised effective internal control over the great majority of these institutions, and, however efficiently they may have done their work, inevitably impeded the growth of initiative and responsibility amongst the non-official

Local Self-Government previous to the Reform Scheme.

members. Secondly, though a limited direct elective system prevailed in many municipalities, the number of elected members was limited by the Municipal Act of 1884 to two-thirds of the total number. The Local Self-Government Act provided for a system of indirect election from local boards to district boards; but, except in the Patna Division where two-thirds of the members of local boards were elected, the members of local boards were appointed and not elected.

Such was the position in 1918. But during the year under review a marked change has taken place. The privilege of electing non-official chairmen has been offered to all the District Boards of the province except to those of the backward tract of Chota Nagpur, and though the District Boards of the Tirhut Division have declined the privilege for the present all the rest have accepted the offer, and there are already nine District Boards, namely Patna, Gaya, Shahabad, Bhagalpur, Purnea, Monghyr, Cuttack, Puri and Balasore with non-official chairmen. The elective system is in force in all Municipalities of the province, and all except four (Patna City, Daudnagar, Chatra and Forbesganj) have the right to elect their own chairmen. Since this report was drafted Patna has had an elected chairman, and the privilege has only been withheld from the other three at their express request. Elected non-official chairmen now hold office in 32 out of the 58 Municipalities. The importance of this change can hardly be overestimated. The District Officer is still the administrative head of his district. He directs the police work, and is responsible for law and order; as magistrate, he also exercises general supervision over the inferior criminal courts. He is the head of the revenue organization, and is ultimately responsible for famine relief. But the responsibility which he formerly enjoyed as chairman of the District Board and of the Municipality for education, hospitals and dispensaries, roads and communications, and the other multifarious activities of local bodies already summarised will henceforward be transferred in the majority of districts to the shoulders of the non-official members of the local community. Moreover the authority, it must now be remembered, by which external control over local bodies is still exercised, is no longer the "bureaucratic" authority which the words "local Govern-

The changed conditions in 1921.

The extent of the change.

ment" signified in 1920. It is now the Minister, who is himself responsible to the Legislative Council, and is an elected representative of his own constituency.

These changes do not exhaust the list of activities of 1921. For further developments of Local Self-Government are already under consideration. A Committee met in Ranchi in 1920 "to advise upon what lines the development of powers and responsibilities of Local Bodies should proceed in future and the nature and extent of the control that should be exercised by the Central Government", and made several important recommendations regarding the qualifications of electors and candidates for election to local bodies, the constitution of such bodies, and the creation by legislative enactment of *panchayats* with jurisdiction in petty civil and criminal cases in addition to administrative responsibility for local education, communications and public health. The Committee also considered the extent to which the existing powers of taxation by local bodies should be enlarged, and the sphere of their activities widened, and made recommendations on the relaxation of external control. The proceedings of this Committee naturally gave rise to considerable interest in the new Legislative Council, and as has been seen in Chapter II, there were several lively debates on many of the subjects with which the Committee had dealt. Finally a representative Conference of members of District Boards and Municipalities under the presidency of the Minister for Local Self-Government was convened in November this year, and considered a new Municipal Bill, the introduction of which had been postponed by the late Government until the Reform Scheme should be introduced. This Conference has recorded resolutions on election to District Boards, on the nomination of members and the election of chairmen of local bodies, on the extension of the franchise, on the responsibility of local bodies for public health, on the external control which should be exercised over them, and on the individual responsibilities of members. The Conference was of opinion that the existing system of indirect election of District Board members by Local Boards should be replaced by direct election, and that ordinarily there should be at least one elected member for each police-station area; that educated women should be eligible both as voters for and

The Local Self-Government Committee of 1920.

The 1921 Conference.

and as members of local bodies; that Local Boards should be constituted out of the local elected members of the District Board; that nominated members should not exceed one-fifth of the total membership and that neither they nor salaried Government servants should be qualified to hold the post of chairman; similar recommendations were made as regards Municipalities. Finally the Conferenced recommenced that the control over local bodies by Commissioners and District Magistrates should in all cases be limited to inspection and criticism.

The Village Administration Bill.

Another question which has been under consideration is the development of a system of village administration with the village *panchayat* as the unit. A Bill has been framed and has been introduced for the creation of Union Boards to exercise administrative functions over groups of villages, and of *panchayats* to exercise judicial functions in individual villages. The Bill provides that selected *panchayats* may be given enhanced powers, and that while Union Boards will be principally concerned with sanitation, they may, if they wish, be allowed also to take over from the District Board the control of primary education, the maintenance of village roads and other work contributory to the welfare of the inhabitants. They may also take over the duties of the existing Chaukidari Panchayats. They will be elected bodies with one or more members nominated by the District Boards by which they will be administratively controlled.

Some defects in the working of Municipalities in 1920-21.

It would be idle to deny that such schemes as these postulate, if they are to prove a success, the growth in the near future of a sense of responsibility and of communal ideas in the members of local bodies which must be much more rapid than it has been in the past. In the Resolutions published by Government regarding the working of local bodies during the financial year 1920-21 attention has been called to several defects in the working of Municipalities. The lack of interest displayed in Municipal matters in the smaller towns is illustrated by the fact that there were only three contested elections in the 33 wards comprised in four Municipalities; less than half the electorate recorded their votes in the Cuttack elections, and 74 meetings of

the various municipal bodies proved abortive during the year for want of a quorum. Lax administration resulted in particularly low collections of dues in three Municipalities (73.0, 74.5 and 75.6 per cent.) and in many others the percentage was less than it should have been. An even more serious delinquency has been revealed in some Municipalities by the Audit Department, in the diversion of grants made by Government for specific purposes to meet current expenses. The Bhagalpur Municipality has even diverted some sums received as donations from private individuals. Systematic misappropriations by members of the subordinate staff were detected by audit in three Municipalities.

The problem of local taxation.

There is, moreover, a very serious difficulty which stands in the way, not only of progress and development but even of the maintenance of the existing standard of administration. This difficulty is financial, and while it may in part be due to the limitations placed by law on taxation by local bodies, all the evidence goes to show that its main cause is the unwillingness of members to incur the odium which attaches to proposals for increasing taxation. During 1920-21 there was actually a decrease in many of the main heads of taxation in Municipalities throughout the province. Their principal sources of income, the rate on holdings and the tax on persons, fell by about nine and thirteen thousand rupees respectively; there was a marked fall also in the tax on animals and vehicles, and there was an average decrease of taxation in 31 out of 58 Municipalities in the province. An even more serious tendency was displayed in one Municipality where a reassessment of the holding tax was reported to have resulted in lessening the amount payable by the richer and more influential tax-payers at the expense of the poorer inhabitants. The seriousness of the financial position of Municipalities is proved by the fact that the assets of 9 Municipalities were exceeded by their liabilities, while the nett assets of four others were reported by the Audit Department to be too small.

A reference has already been made in the last chapter to the necessity for an increase in the revenue of local bodies if effect is to be given to the desire expressed by the Legislative Council to extend the sphere of primary education, and to the fact that only one Municipality has so far availed itself of the provisions of the

Primary Education Act. The percentage of expenditure by District Boards on education amounted in 1920-21 to 17.94, and the amount spent by them has more than doubled since the institution of the province. But the problem of finding sufficient funds to meet the demand now made is still unsolved. It is possible that some economy will be effected in the matter of roads and communications, upon which, in the opinion of the Council, a disproportionate amount has hitherto been spent. But even if District Boards are found to agree with this view, there is a problem even more urgent than that of education the solution of which is capable of absorbing all surplus funds for many years to come. This is the problem of public health.

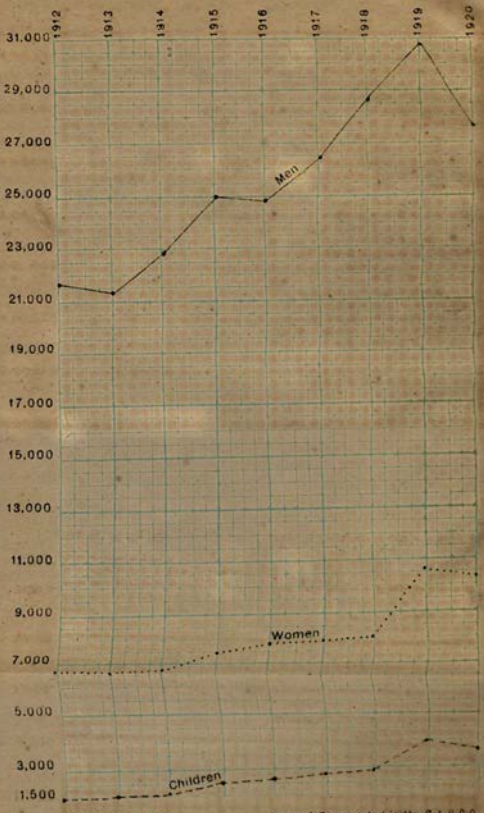
The main heads of expenditure.

Considerable eloquence has been expended in the Legislative Council on the subject of public health, and it has been contended that neither Government nor District Boards have devoted as much attention and money to this object as its importance warrants. The line taken by almost all the speakers was that the interests of public health demand an immediate multiplication of the number of hospitals and dispensaries, and the standard fixed in one resolution was that of one dispensary for each police-station area. Government have not been idle in this matter. Expenditure on the Medical Department rose from Rs. 5,83,000 in 1912-13 to Rs. 16,85,000 in 1921-22, and the medical budget demand for 1922-23 amounts to Rs. 15,41,000. Expenses in connection with malaria and epidemic diseases amounted between 1912-13 and 1919-20 to well over 3½ lakhs, and in the last two years six lakhs have been distributed to District Boards to assist them in meeting the capital cost of constructing dispensaries. The increase in the number of hospitals and dispensaries since 1913 is also eloquent of the attention devoted both by local bodies and by Government to medical relief. In that period Public State hospitals have increased from 15 to 25 and Local Fund dispensaries from 166 to 237. The former are controlled and maintained by Government, and the latter by local bodies, with assistance in most cases for their initial cost from Government. Private institutions, aided by Government, have risen in number from 16 to 21, non-aided Private institutions from 65 to 77, and Railway hospitals from 40 to 43. In addition to these, there were

The progress made in medical relief.

Diagram

showing the number of Men, women, and Children respectively treated as indoor patients in State-Public, Local Fund and Private Aided Dispensaries from 1912 to 1920



Reg No. 27 R – 1922

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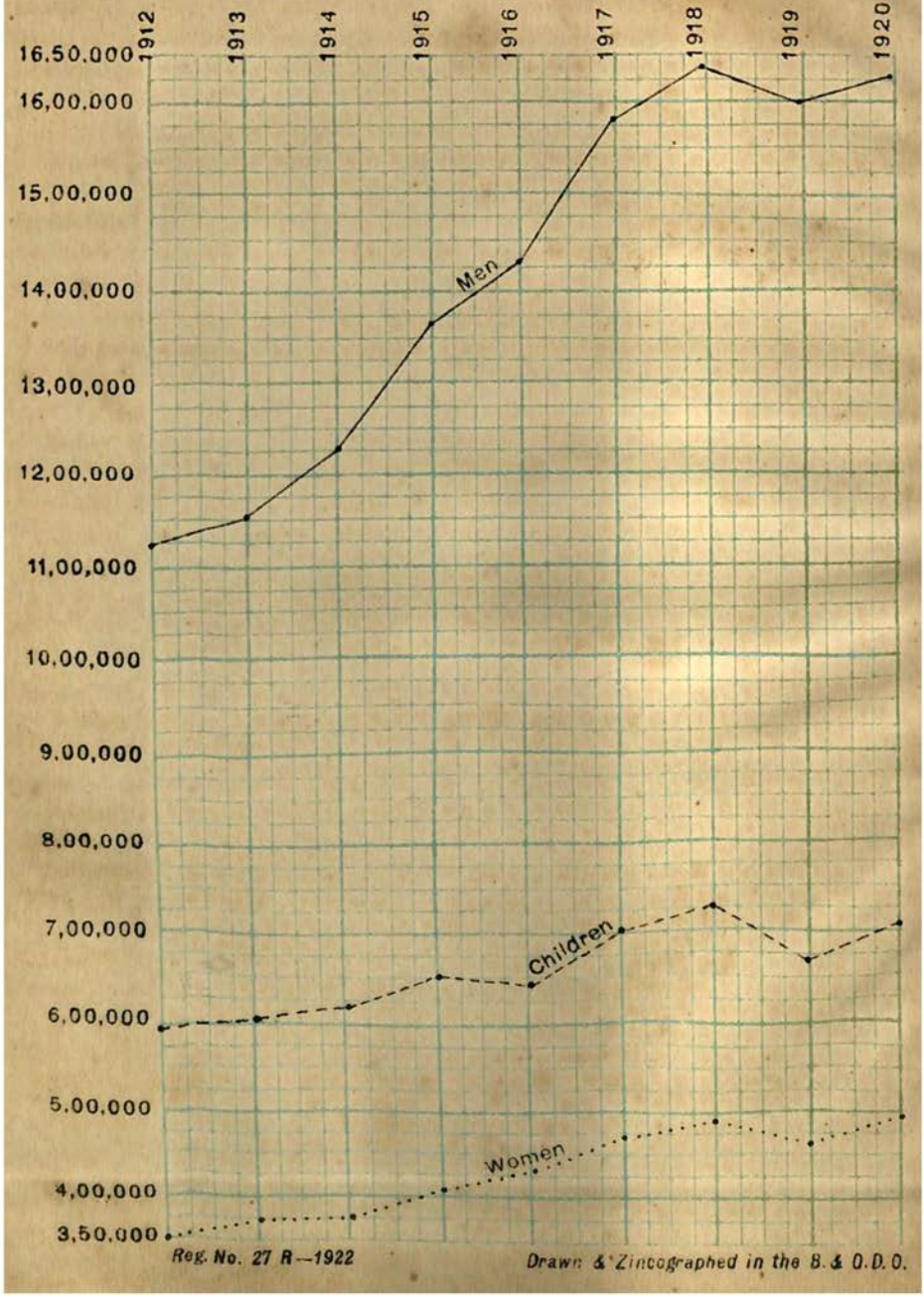
Diagram

showing the number of Men, women and Children respectively treated as out-patients in State-Public, Local Fund and Private Aided Dispensaries from 1912 to 1920



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during 1921 seventeen new dispensaries under construction and 12 travelling dispensaries were working in areas not provided with permanent institutions. There are also eight Leper Asylums in the province, which contained this year over 1,850 patients, and a proposal is under consideration for the establishment of a State Leper Asylum at Gaya or elsewhere for the compulsory segregation of lepers, who numbered at the time of the 1911 census nearly eighteen thousand. Finally a Radium Institute, the first of its kind in India, will shortly be opened at Ranchi.

There are probably no more popular institutions in rural areas than these local hospitals and dispensaries; and the work done by them both in mitigating the severity of the more serious diseases such as malaria and cholera, and by bringing ordinary medical aid and free medicines within the reach of the poorer classes is shown clearly by the statistics of patients which are illustrated in the two diagrams. The 1921 figures are not available, but last year the total of in and out-patients was more than 28½ lakhs. Indoor patients amounted to nearly 42 thousand and the number of surgical operations performed to over 148 thousand. More than 755 thousand persons were treated for malarial fever, more than 8 thousand for *Kala-azar*, nearly 6 thousand for tubercle of the lung, and 62,600 for diseases of a venereal origin. The total number of out-patients was 2,844,520. So far, therefore, as hospitals and dispensaries are concerned, there has already been a great deal done, and the extension of the system is only delayed by the lack of funds. It is true that hitherto considerable difficulty has been found in obtaining Bihari doctors, particularly Hindus. Out of the 155 permanent Sub-Assistant Surgeons in the province there are only 9 Bihari and 33 Oriya Hindus and 24 Muhammadans while there are 63 Bengalis and 23 "domiciled" Bengalis. This difficulty has been partly due to caste prejudices, which are stronger among Biharis than among Bengalis; but it is also partly explained by the absence of a Medical College in the province. At present medical students from Bihar have to seek admission in the Calcutta Medical College, in which only 18 seats are reserved for this province, though an average

Hospital and dispensary patients.

The medical staff and the want of a medical college.

of 40 to 60 students have annually been seeking admission for the last few years. Endeavours are however being made to remedy this defect. The Temple Medical School at Patna has been greatly improved in recent years and during the last year a large hostel has been constructed. It is intended to convert the school into a college; but this cannot be done till a new Medical school for training Sub-Assistant Surgeons has been established. The new medical school will probably be located at Darbhanga where the existing hospitals will supply clinical material. For the capital cost of the college and the new school funds are already available and a generous donation of Rs. 5 lakhs by the Maharajadhiraja of Darbhanga together with the subscriptions given by other leading gentlemen of the province in commemoration of the visit of His Royal Highness the Prince of Wales should suffice for the erection of new laboratories and lecture rooms for the College and of the necessary buildings for the school. Funds however are not yet available to meet the maintenance charges and some time must elapse before these institutions are opened.

The Council debates show a strong desire to revive the Ayurvedic and Hakimi system of medical treatment. Two local bodies asked permission to maintain Ayurvedic dispensaries with funds specially raised for the purpose. This permission was granted. Kabirajes have been brought from rural areas and taught to disinfect wells. After they learn they receive a certificate and go back to their respective villages. It is intended to employ these men to disinfect sources of drinking water-supply in the villages where they reside and to treat the villagers for ordinary ailments. In the opinion of the Hon'ble Minister these men enjoy the confidence of the villagers and he hopes they will be successful in dispelling the superstitious belief which the people have about cholera and other epidemics; further that they will be able to remove the existing prejudice against foreign medicines. Some Kaviraj students evinced a keen interest in the lectures and the use of the microscope which revealed to them an unknown world teeming with enemies to human life—the disease germs.

A defect in hospitals and dispensaries which is much more difficult to remedy is the lack of special accommodation and special doctors for female patients. The number of women treated as in-door patients last year (10,481) was considerably under half the

total of male patients (27,811), and the number of female out-patients was less than a third of the number of men. There are female wards in all hospitals; and female waiting-rooms in all dispensaries. But so long as the *pardah* system prevails, the great majority of the women of the higher classes must continue to be deprived of the benefits of modern medical and surgical science, except in so far as they can purchase medicines through their servants and male relations. For the *pardah* system has hitherto made it almost impossible to procure qualified Indian Lady Doctors. The importance of developing this branch of the medical service is obvious. Infant mortality in 1920 was 169.5 per mille, and in urban areas 200.4 per mille, and with a female population which numbered at the beginning of this year 17,238,320, there are only 3 English, and 36 Indian women doctors of all classes. There has been something done to establish a service of trained midwives by giving courses in various hospitals. About 105 *dais* have been trained in the Hatwa Hospital since 1902, and about 282 elsewhere, and a Maternity Supervisor has been appointed this year in Patna for the improvement of maternity methods. But it is obvious that Government can do little in this matter without more active co-operation on the part of local bodies than has yet been forthcoming.

Medical relief for women.

A summary has been given above of the medical relief afforded in the hospitals and dispensaries which are scattered throughout the province. But it is necessary to emphasize that medical relief only touches the fringe of the problem of public health, and that the financial difficulty which stands in the way of the rapid multiplication of dispensaries is not the main obstacle to the improvement of public health. This lies rather in the difficulty of introducing sanitary conditions into the life of the masses, and has deeper economic causes. For the ignorance of the majority of the population as to the connection between dirt and disease is due largely to their poverty, which is not only the cause of their illiteracy and ignorance, but renders the introduction of even the most elementary principles of sanitation into an Indian village a matter of serious practical difficulty. A review of the principal epidemic diseases in Bihar and Orissa is given in

The importance of sanitation to public health.

the Annual Sanitary Report for the year 1920 which throws an interesting light on the causes of these epidemics and on the important connection between dirt and disease in this province. As considerable interest has been shown in the Council in the serious cholera epidemic which broke out in Patna Division this year, a summary may conveniently be given of the facts and figures which the Director of Public Health has collected. These will also throw light on the importance of a scheme of Public Health organization which has been prepared by a sub-committee of the Local Self-Government Conference at the close of the year.

The chart on the opposite page and the statement given below give the ratio of deaths per mille from the chief diseases, the seasonal incidence of these diseases, and their distribution between rural and urban areas in 1920 and 1921 and in the previous decade.

	Urban.			Rural.			Combined.		
	Ten years' average.	1920.	1921.	Ten years' average.	1920.	1921.	Ten years' average.	1920.	1921.
1	2	3	4	5	6	7	8	9	10
Cholera	3·0	1·6	3·0	2·8	·7	2·6	2·8	·7	2·6
Small-pox	·2	1·3	·2	·2	·6	·2	·2	·6	·2
Plague	2·8	1·4	1·5	1·2	·5	·4	1·2	·5	·4
Fever	13·3	16·3	16·4	23·2	22·3	22·8	22·0	22·0	22·6
Dysentery and diarrhœa	2·0	1·8	1·6	·8	·8	·8	·9	·8	·8
Respiratory disease ...	·7	·8	·8	·1	·2	·1	·2	·2	·2
Injuries	·6	·5	·5	·5	·4	·3	·5	·4	·3
All other causes ...	8·6	8·0	7·1	6·3	5·1	5·2	6·4	5·2	5·3
Total ...	31·7	32·1	31·6	35·5	30·8	32·8	35·4	30·3	32·8

The first point which these statistics emphasize is the difference in the distribution of disease in rural and in urban areas. In the towns respiratory diseases, *e.g.*, consumption, pneumonia and influenza accounted in the ten years' period for four times as many

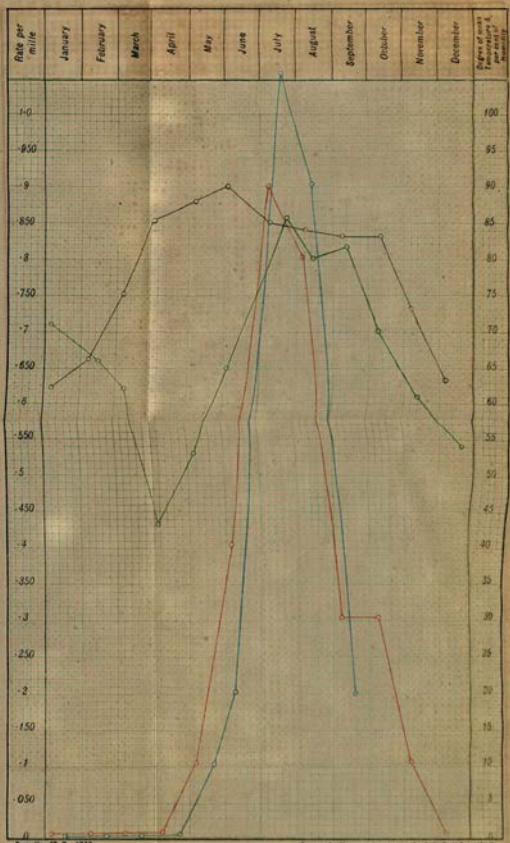
Chart of Cholera mortality, Mean Temperature
and Humidity for Patna Division

Red line .. Average Cholera death rate (10 years)

Black line .. Mean Temperature

Green line .. Humidity

Blue line .. Cholera 1921 (reduced three times)



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deaths as in rural areas, and cholera and plague for twice and three times as many deaths. Over-crowding and the consequent facilities offered in towns for the spread of infection account for this; and the fact that small-pox takes a heavier toll in rural areas is due solely to the greater thoroughness with which vaccination can be carried out in the towns, where it is compulsory. Fevers on the other hand are more prevalent in the countryside, partly because there are greater facilities in the country for the breeding of anopheline mosquitoes, and partly because the economic condition of the people is worse in the country than in the towns.

Distribution of disease between urban and rural areas.

It must, however, be noted that these statistics are not prepared by any trained agency but are based on the reports of the village chaukidars who are unable to differentiate between consumption, pneumonia, influenza and malaria, though they may be able to recognize cholera, plague and small-pox.

The second striking feature is the importance of cholera, which has accounted for an average of nearly a lakh of deaths a year during the past ten years. This year, the cholera mortality amounted to about 91 thousand, *i.e.*, was rather less than the normal; but considerable attention has been drawn to the disease owing to the occurrence of an exceptionally severe outbreak in the headquarters Division of the province. A special report on this epidemic has been drawn up by the Director of Public Health, and his conclusions are of considerable interest. The chart reproduced opposite shows the average death rate from cholera in the Patna Division for the last ten years, the death rate in 1921 (divided by three to keep it in the chart) and the associated climatic conditions of mean temperature and humidity. This chart shows that the period of the disease is the usual period and that the epidemic is the usual seasonal epidemic, but that it was more than three times as severe as the average Patna epidemic. A comparison with epidemics in other divisions, during the past five years shows further that while it was more localized than is usually the case, the mortality during the epidemic period (st May to 10th September), which amounted in the Patna Division to 37 thousand, was exceeded in 1918, when there were over 63 thousand

Cholera.

The cholera epidemic in Patna in 1921.

deaths in Tirhut alone, and was not much greater than the mortality in Tirhut in 1916 and 1917. There is in fact a regular cholera season in this province, associated with climatic conditions of consistently high humidity and mean temperature. These conditions favour the multiplication of flies, which transmit the infection, and this multiplication was rendered unusually rapid and effective this year by a temporary failure in the rains after the breeding period. To the north of the Ganges, where there was more rain, cholera was much less severely epidemic; and general rainfall in August produced an immediate improvement. ...

In Orissa, the conditions are somewhat different from those in the rest of the province. As the humidity and mean temperature are consistently high, cholera may be epidemic in Puri at any time of the year; but epidemics as a matter of fact usually recur in March—April and in July—August, and this seasonal incidence of cholera is due not to peculiar climatic conditions but to the Dol-jatra and Rath-jatra festivals at Puri, which offer unique opportunities for the rapid spread of infection. Cholera germs do not usually live long outside the human body and the original source of every outbreak is some infected person who may have himself recovered from the disease, but from whom the disease is transmitted either by direct contact or more generally in the case of widespread epidemics by more general means, namely the infection of the water-supply and the infection of food by flies.

Sources of cholera infection.

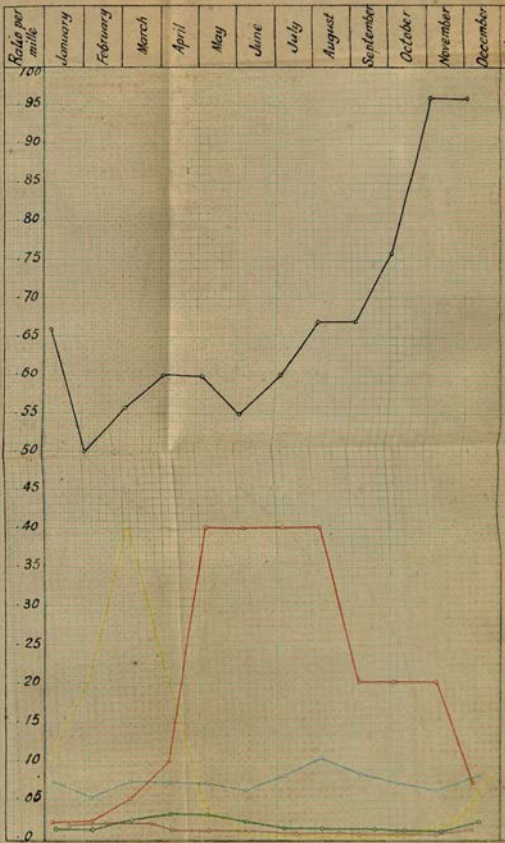
It follows that there are two main ways of preventing cholera. The first is the provision of a pure water-supply, and the second is good conservancy, which must include, if epidemics are to be effectively stamped out, the adoption by the masses of the use of latrines. The most complete experiment in intensive sanitation tried as yet in this province, is that of the Jharia Mines Board of Health. The report of the Board for 1920-21, shows that cholera except in one year (1919), has never become severely epidemic in the area controlled by the Board, and in that year nearly half the patients were cured. Sanitation gangs carry out prompt disinfection measures as soon as a case of cholera is reported. The taking of water for cooking and drinking purposes from insanitary "tanks"

The prevention of cholera.

The Jharia Mines Board of Health.

Chart of Chief Diseases – 10 years average

Deep Black Line = Fevers — death Rate (Reduced 3 times)
Red " = Cholera "
Yellow " = Plague "
Blue " = Dysentery and Diarrhoea "
Green " = Smallpox "
Purple " = Respiratory diseases "



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is prohibited in every bazar, and in most villages. There is a rigorous control over food-stuffs; and unceasing efforts are made by the Board to induce mine-owners to maintain sanitary conditions in the collieries by an effective conservancy system and by proper housing accommodation. The use of latrines has been popularized with considerable success; small-pox is effectively dealt with by a vaccinating staff, and an important beginning has been made in a campaign against hook-worm. There is no reason why similar efforts to these should not, if public opinion can be genuinely roused, be made at least in all the Municipalities of the province. But so far remarkably little has been done. There are water-works in a few of the larger towns; but at least two of these, those of Gaya and Bhagalpur, have not proved satisfactory, and the only practicable means at present for preserving a pure water-supply in the majority of Municipalities is for the Municipal Commissioners to carry into effect such means as those employed by the Jharia Board to protect wells and "tanks" from contamination. The disinfection of wells for the prevention of the spread of cholera is indeed already carried out by local bodies. But the lack of co-operation on the part of the villagers in carrying out and repeating this process of disinfection, the delay which generally occurs in the reporting of outbreaks, and the lack of supervision over the staff of sub-overseers who are usually entrusted with the work, combine to render the effect of these measures often negligible. Similarly the replacing of mud by masonry wells in rural areas is seldom systematically carried out, and cannot be successful in improving the water-supply until the system of Village Unions has been extended and public opinion created. An intensive sanitation scheme has just been started in Gaya district in a small area. It is still too early to report what progress has been made; but the object of the scheme, half the cost of which is being borne by Government, is to discover what measures can be taken in a rural area without heavy expenditure for the prevention and cure of disease and for the improvement of public health.

The lack of effective sanitation in Bihar and Orissa.

Dysentery and diarrhœa are both diseases which can to a large extent be prevented. They are most prevalent in Orissa, which usually accounts for about two-thirds of the total mortality. The average death rate for the ten years previous to 1920 was 2·0 per

mille, and about 28,700 persons died this year from these diseases. Like cholera their prevention depends largely on improved conservancy and water-supply, but their occurrences is also directly due to bad food. The analysis of food carried out in the Sanitary Laboratory in 1920 showed that no less than 83 per cent. of *ata* and flour samples, 71.6 per cent. of mustard oil, 62.7 per cent. of *ghi*, and 60 per cent. of sweetmeat samples were adulterated. An attempt has been made by Government to remedy this dangerous state of affairs by the extension of the Food Adulteration Act to most of the important Municipalities. But the value of the powers conferred by this Act is not yet sufficiently appreciated, and little or nothing has been done this year in the majority of Municipalities to put the provisions of this Act into force.

Dysentery and diarrhœa.

Another disease which illustrates forcibly the economic importance of sanitation is hook-worm (Ankylostomiasis). Little or nothing is known by the general public of the disease, though it is responsible for more enfeebled health and diminished vitality in the mass of the population even than malaria. A special staff has been investigating this disease in Bengal recently and has found that approximately two-thirds of the population are infected with hook-worm; and such investigations as have been made among the Jharia coalfields and in the jails in this province have revealed a similar state of affairs. The disease is curable within a few days, and over 400 cases were treated last year in the Jharia Board area. But reinfection is bound to follow unless the prevailing insanitary habits of the people are radically changed. At present any villager by walking across the fields in the neighbourhood of houses with bare feet is liable to be infected.

Hook-worm.

A disease which is still responsible for thousands of preventible deaths in Bihar and Orissa is small-pox. Last year 23,000 persons died of small-pox, and about 7,800 this year. The average mortality for the decade previous to 1920 was .2 per mille and over 94,000 persons have died from small-pox in the last ten years. Vaccination is a sure preventive against this disease, and an adequate staff of licensed vaccinators is provided throughout the province, by whom vaccinations can be performed for the modest fee of two annas a head. It is compulsory only inside municipal limits, where paid

vaccinators are employed. The statistics of the last ten years indicate that, as might be expected, a decline in the number of vaccinations has, generally speaking, been followed by increased mortality. Thus the death-rate from 1911-12 to 1915-16, when the number of vaccinations was over 1¼ million annually was .08, .06, .11, .22 and .42 per mille respectively. But a decline in 1918-19 in the number of vaccinations to less than a million was followed in 1919-20 and 1920-21 by death rates of .53 and .56. The decreased mortality this year may similarly be ascribed to an increase of more than 46,000 primary operations performed between April 1920 and March 1921. The unwillingness of the poorer population to submit to vaccination is partly due to ignorance and superstition, but it may also partly be ascribed to the fact that a fee, small as it is, is charged and to the taking of illegal gratifications by the vaccinating staff. A very important recommendation has been made at the close of the year by a Sub-Committee of the Conference, to which reference has been made above, that vaccination should everywhere be made free and compulsory, and that it shall be carried out by a Public Health staff under the supervision of the medical officers in charge of the local dispensaries.

Small-pox.

Plague deaths this year amounted to about 16,500, a decrease of about 3,000 on last year's figures. The average death-rate per mille for the previous ten years was 1.2 and the recorded statistics of plague since the year 1905 show that severe epidemics recur in this province at periodic intervals of about three years. The epidemic period begins in December and declines rapidly in April, and its prevention, like that of cholera and malaria, is largely an economic question. The relationship between plague and the bad state of housing in India is clearly proved by the fact that while plague has often broken out within the last decade in sea-port towns in England, it has never become epidemic, because housing conditions in England prevent the close association of rats with the people. As the substitution of brick for mud-houses in rural areas in India is a practical impossibility, the most effective means available to the rural population of checking the spread of plague is to evacuate their houses; and this is now generally known and acted upon. Facilities for inoculation are provided in all plague-infected districts;

Plague.

but inoculation has always been unpopular, and the number of inoculations has actually declined in Bihar and Orissa from an average of 12,140 in the five years 1913 to 1918 to 2,600 in 1920. The definite though irregular decline in plague mortality during the last fifteen years may be partly due to the greater promptness with which houses are evacuated year by year; but the Director of Public Health has given reasons for holding that this decline is an indication of the close of a regular plague cycle, which will be completed in another 10 or 15 years, and that the country may then be freed from plague for another 70 years.

The largest death-rate of any disease in this province is caused by fevers, of which the chief is malaria. The deaths from fevers this year amounted to about 770,000, and the average mortality per mille for the previous decade amounted to 13.3. As the result of a spleen census conducted among children of under 10 years of age in five districts, which was concluded this year, it was found that 7.05 per cent. were suffering from the enlarged spleen which is the result of malaria; and though the prevalence of malaria is chiefly confined to the border land of Nepal, the foothills of the Chota Nagpur and Orissa plateaus and the Santal Parganas epidemics are frequently spread over the province whenever climatic conditions favour the rapid breeding of the anopheline mosquito. Such an epidemic followed the abnormal Saran flood this year. Prompt measures were taken to reduce mortality by distributing quinine. No less than 44,000 doses of quinine mixture and 46,000 of quinine powders were issued for distribution through the agency of some 40 vaccinators and two travelling doctors, besides further medicines distributed through the agency of volunteers and of co-operative societies. But the fact that in spite of an annual consumption of quinine which exceeds 600 lbs. a year, distributed through postmasters, drug vendors, vaccinators, shop-keepers, school-masters and village headmen, the mortality from fevers still remains so high, is a convincing proof of the necessity for prevention rather than cure. The line of future progress in this direction may be found to consist in the combination of agricultural improvements with sanitation. For instance, the draining of marshes in order to produce better crops, which has already been mentioned in Chapter IV as one of the problems to which the Agricultural Department is devoting its

Malaria.

attention, may be found to be capable of serving also the purpose of preventing the breeding of mosquitoes. But such steps, if they are to be effective, must be spread over a wide area, and must entail an amount of expenditure which the province is unlikely to be able to afford for many years to come. But medical relief is at present doing a great deal to keep the death-rate from malaria within bounds, and the largest number of patients treated for any disease in dispensaries are those suffering from malaria.

The facts and figures relating to public health which have been summarized above indicate the difficulties with which local self-governing bodies are faced in developing the administration of this important branch of their duties. But a determined attempt has been made this year to tackle the problem. The whole system of medical relief in rural areas and of the measures necessary to combat epidemics has been considered by the Conference of representatives of District Boards and Municipalities which was convened in November, and a detailed scheme has been drawn up by a Committee elected by the Conference. The Conference passed resolutions that District Boards and Municipalities were prepared to accept the administrative responsibility for taking measures against epidemics, with financial assistance from Government, and that a public health organization was desirable. The main proposals of the Committee are, first, the amalgamation of the medical and sanitary staff, including the staff of vaccinators, into one permanent organization under the administrative control of District Boards, subject to the general authority of a central Board of Health; secondly free compulsory vaccination throughout the province; thirdly the combination of general sanitary duties with strictly medical work by the officers in charge of dispensaries, who would be given a special staff for the purpose; and fourthly District Health Officers whose duties would include touring for inspection and supervision, and the training of the district staff. The report of this Committee has been circulated to District Boards after the close of the year, and final orders will be passed by Government after considering their opinions.

A scheme for a provincial public health organization.

The hospitals and dispensaries described above are intended primarily for the treatment of bodily diseases and ailments. Less progress has been made by medical science both

in India and in other countries in the treatment of mental diseases. When this province was separated in 1912 from Bengal, the Patna Lunatic Asylum was the only asylum in Bihar and Orissa; but even at that time it had been decided to establish a large Asylum at Ranchi for Indian lunatics from Bengal and this province. The war has delayed the completion of this institution, but it will, it is hoped, be ready for occupation after a year or at most two years.

Lunatic Asylums.

On the opening of this institution, the Patna Asylum will be abandoned. The asylum though some improvements have been made since 1912, and though the accommodation has been increased, is unsuited for modern methods of treatment; and with an expert staff of aliénists considerably better results may be expected at the new asylum, or as it should more correctly be termed, hospital for the treatment of mental diseases. In 1918, a large asylum was opened at Ranchi for European lunatics for all northern India, which is capable of accommodating 92 male patients and 88 female patients. An expert alienist is in charge and modern therapeutic methods have been adopted with most satisfactory results, the percentage of patients discharged cured rising from 9.15 in 1920 to 25.17 in 1921. The number of criminal lunatics amounts only to 11, all of whom are suffering from complete dementia and have not the slightest hope of recovery. Those patients who are sufficiently rational to work are encouraged to do so; some assist the paid staff in distributing food, others in the garden, others find occupation in making baskets or in needle-work and knitting, and have been encouraged to work by rewards or payment. Amusements are also provided for them, both indoor and outdoor, and the Asylum has two well-equipped recreation-rooms.

It is of interest to note that a very common cause of insanity among Indian patients is Indian hemp or its derivatives. In the last ten years, out of an average annual total of 365 patients, an average of 58 a year, or 14½ per cent. are reported to have been suffering from the after-effects of this drug, as compared with an average of only 26 a year or 7.1 per cent. from the effects of alcohol. Alcohol is said to have been responsible for an average of five cases only a year among the Ranchi patients and there have been only three cases of European patients suffering from drugs in four years.

CHAPTER VII.

Political and General Events.

The most striking feature of the history of the province in 1921 has been the orderly development of representative government on constitutional lines side by side with a political campaign which has for its avowed object the paralysis of authority, and which has been conducted with all the more uncompromising activity as its leaders by their self-imposed abstention from the first elections have closed the only other outlet for their political ambitions. Some references have already been made in previous chapters to the activities of this party both at the time of the elections and subsequently both in the attack on Government and Government-aided schools, which was admittedly a non-co-operation movement, and in the "temperance" campaign, which though it enlisted the support of others besides the adherents of non-co-operation owed many of its characteristic features and a great part of such success as it attained to the active support of the non-co-operation leaders. The following paragraphs give a brief description of the various manifestations of unrest and lawlessness which have followed the propaganda of this party, and of the background of industrial and economic unrest in which the scene of their political activities has been laid.

The year opened with a display of considerable activity on the part of the non-co-operators. Local arbitration courts were formed in a number of centres with the object of discouraging litigants from bringing their cases to the ordinary courts of justice. The attack on Government and Government-aided schools was developed side by side with the establishment of "national" schools. The "temperance" movement spread from Shahabad through the Patna and Bhagalpur Divisions, and political propaganda was active in Orissa, which had in the previous year been little affected by the movement. Both the Utkal Union Conference and the All-Orissa Students' Conference decided to adopt non-co-operation, and a vigorous appeal was made by the Bihari Students' Conference at Patna in furtherance of the withdrawal of students from all Government schools and colleges. This was followed before the end of January by the spread of the

January.

practise of picketting the larger schools and colleges and by the temporary withdrawal of considerable numbers of students. There was a noisy demonstration in the Sambalpur Zila School and a strike at the Ravenshaw College, Cuttack. A significant illustration of the effect of political agitation on an industrial area was provided by a strike of the menial staff of the Bengal-Nagpur Railway at Adra, which immediately followed some inflammatory speeches delivered locally by a political leader, and by two other strikes at the Kamardubi Iron Works and at Bhujudih, in the same district. All three strikes were, however, comparatively shortlived. A serious outbreak of *hat* (market) looting occurred in Tirhut, due partly to economic causes but undoubtedly intensified by the growing currency among the uneducated lower classes of the belief that the forces of law and order were weakening and that *Swaraj* was imminent. Finally unrest began to be manifested in the police force, petitions being received from some hundred constables in Gaya district which contained threats of a strike unless their pay was increased to a certain scale.

February.

February was marked by an attempt, which attained partial success, to spread non-co-operation among the Oraon and Munda aboriginal inhabitants of Ranchi district. The poverty and ignorance of these aborigines, and the fact that wealth and influence are in Chota Nagpur more concentrated than elsewhere in the hands of a comparatively small body of landlords, made the spread of grotesque rumours and of inflammatory ideas particularly easy and at the same time dangerous. Instances of propaganda of this type were quoted in the Legislative Council in March by a non-official member, and are of some interest. The impression became prevalent that under the new *Raj*, of which the institution was imminent, the eating of flesh and the drinking of spirit were proscribed, and many aborigines from the northern parts of Ranchi district rushed to the markets and disposed of their goats and sheep for fabulously low prices. The price of goat's meat fell, in Ranchi, from 12 to 4 annas a seer. Pigs were sold in some localities at the instigation of Hindus, and there was a widespread belief that Mr. Gandhi was either already enthroned as King, or just about to be, and that he was invested with divine attributes. These beliefs and their effects recall an incident of 1915, when a supposed supernatural mandate for the prohibition of drink was followed by the abstention of hundreds of Oraons from their favourite

beverage, and was only revoked by a placard posted by an enterprising subordinate in the Excise department on some trees in a market place, in which an order from the deity was published that the people should resume their drink.

In Purnea district an active campaign of speeches and meetings was accompanied by an epidemic of *hat* looting, which spread to parts of Monghyr and Bhagalpur, by the boycott of the auction settlement of ferries and pounds, and by *hartals* in both Monghyr and Bhagalpur on the occasion of visits to those towns by His Excellency the Governor. In Tirhut some police officers were assaulted in the investigation of a case in which a woman had been, it was alleged, tarred and feathered by the orders of a non-co-operation tribunal. The institution of large numbers of *panchayats* was carried out in Saran. Some Europeans were mobbed by a crowd near Muzaffarpur and two attempts were made to wreck the cars of Europeans by digging pits across the roads. The strike of the Government Press, to which a reference has been made in Chapter II, occurred during this month, and a visit was paid by Mr. Gandhi to Patna. The unrest among the subordinate members of the police force at Gaya culminated in a strike which spread to a few police-stations in the interior of the district. But with a few exceptions all resignations were withdrawn within a few days, and the temper of the men was excellent. There was a shortlived strike at Giridih in the East Indian Railway collieries, which may be fairly ascribed to political propaganda, as the wages of the men had been raised by 50 per cent. in December 1920. Petty local strikes of menials and servants of Europeans at Dhanbad and in the Santal Parganas, though of no real importance, were instances of a class of domestic disturbance to which the province had hitherto been a stranger.

In early March there was a recrudescence of small police strikes in Patna, Purnea, Monghyr and Champaran, and it was found necessary to dismiss a number of men. The strikes were shortlived. The excise campaign was carried on with vigour in Ranchi and Manbhum, where picketing and social boycott were extensively employed in order to render the auction settlement of spirit shops a failure. Mr. Gandhi paid visits to Cuttack and Puri. These visits were not attended by any outbreaks of violence, but they were followed in April by a vigorous campaign of speech-making in Orissa, and by

March—April.

rumours, which found ready acceptance in the Holy Land of the Hindus, that Mr. Gandhi was an *avatar* of the Deity and a worker of miracles and that a new Raj associated with his name would soon replace the existing form of Government. In the meantime the non-co-operation party developed a new attack elsewhere, which consisted of an attempt to capture seats on Municipalities and District Boards. A number of seats were captured on the Muzaffarpur municipality, and avowed non-co-operators have subsequently stood for election on other Municipalities and District Boards. Towards the end of the month a false rumour gained currency in Patna that the Shiah shrine at Najaf in Mesopotamia had been bombarded by British troops, and caused some local excitement.

In May occurred a series of incidents which indicated a growing tendency to disorder. There were noisy demonstrations in and near the courts during the trial of non-co-operators on several occasions. A serious riot occurred in Giridih. The prosecution of a cultivator had been ordered by the police for an alleged assault committed by him in order to give effect to an order of social boycott passed by a non-co-operation *panchayat*. A mob, which swelled to several thousands, followed the accused to the Magistrate's court and when, on his refusal to provide bail, he was being taken to the jail, the mob pelted the police and then besieged them in the Jail Warder's quarters. Later in the day the Sub-Inspector of Police was assaulted with brickbats in the thana, and after he had attempted to disperse the mob with revolver shots they broke into the thana and did considerable damage. Nor was this an isolated instance. A similar demonstration, though on a much smaller scale, took place in Gaya, where a crowd refused to allow an accused to be conveyed to jail in a car. In Patna four petty offenders were escorted to court by a crowd and garlanded. There was a demonstration at the transfer of a prisoner to the Bhagalpur Jail; and a large crowd behaved in an unruly manner at the courts of the Subdivisional Officer of Bettiah in Tirhut and of Bihar in the Patna Division. There were two cases of arson in Cuttack, which were due to political causes. In one case the office of an Inspector of Schools, and in the other the office of the Principal of the Ravenshaw College were set fire to. There were also several assaults on Europeans in different parts of the province. These outbreaks were followed by a period of comparative

May—June.

quiet in the end of May and June, due partly to the action taken by Government, partly to factions among the political leaders of the extremist party, partly to difficulties caused both by the collection and by the administration or mal-administration of funds, and partly to a Hindu-Muhammadan split over the question of cow-sacrifice, which the approach of the Bakr-Id brought into inevitable prominence. The Khilafat agitation was revived by the creation of a new Provincial Organization Committee and there were two important Muhammadan meetings held in the Patna Division in the end of June.

The nervousness among the political leaders about the approaching Bakr-Id culminated in an invitation being sent to Mr. Gandhi, who paid another visit to the province. But, owing partly to the work of Conciliation Committees, and partly to the preventive action taken by the police and District Officers, the Bakr-Id passed off quietly. July, however, witnessed the beginning of yet another political development, namely, the boycott of foreign goods, particularly cloth. The price of *Khaddar* cloth in Patna rose from Rs. 10 to Rs. 15 a piece in view of the expected demand, but there was a general inclination on the part of the big merchants to await developments from Bombay. The cloth boycott was the main subject for discussion at the meeting of the All-India Working Congress Committee held in Patna on August 16th, at which Mr. Gandhi was present, and it was resolved to bring about an effective boycott before the end of September. In the meantime the volunteer organization was being improved. The Provincial Congress Committee issued a circular letter of warning to district committees that though the time was not yet ripe, civil disobedience had not been abandoned, and they must be prepared for it. In some districts a constitution of provisional government was actually drawn up.

July—August.

As had been anticipated, political agitation was directed early in September mainly against foreign cloth. Lala Lajpat Rai was brought down to Bhagalpur, which is the chief centre of cloth distribution in the province, and undertakings were canvassed for from cloth merchants to buy and sell no more foreign cloth. But there was little picketing, and the destruction of foreign cloth met with scanty support. The movement nowhere attained the success which

September—October.

attended the attack on spirit shops, which was revived again about this period, and was accompanied by systematic picketing and a good deal of violence. A number of prosecutions had to be undertaken for illicit distillation, particularly in the Chota Nagpur Division. The outbreak of the Moplah Rising in the Madras Presidency at first attracted remarkably little attention in public speeches; but the arrest of the Ali brothers was followed by a recrudescence of speeches and meetings throughout the province. The resolutions of the Karachi Conference were repeated in the meetings both of the Provincial Congress and Khilafat Committees early in October, including the boycott of the impending visit of His Royal Highness the Prince of Wales; more or less violent speeches were made at Arrah, Puri and elsewhere, and indignation meetings were held throughout the province in several centres. The "Bihari Students' " Conference was marked by similar violence of language, and bonfires of cloth were common on Mr. Gandhi's 53rd birthday. During the last half of October agitation increased in Tirhut, where racial feeling tends to be more bitter than elsewhere owing to the number of European landlords and the agrarian history of the past. The boycott of established bazaars was systematically carried out in Champaran, and in the Sitamarhi Subdivision of Muzaffarpur district two orders of the Magistrate prohibiting the holding of meetings were disobeyed. The Munsif's office was broken into and a number of registers were burnt. A large crowd on another occasion hooted three Europeans, one of whom was the Superintendent of Police, whose car had knocked down two people while it was passing through the town. A shortlived strike in a colliery at Giridih was due to an unfounded allegation of an assault by a European on a cooly woman, and illustrates the excitability of the masses when any charge is brought against a European.

The agitation in Tirhut culminated in the burning of Chautarwa Factory in Champaran early in November, during the absence of the manager. The attack appears to have been deliberately organized and the fact that a mob which apparently amounted to several thousand persons could for several hours of day-light work its will on this isolated factory naturally led to considerable indignation and alarm among the Planting Community. There were some more demonstrations in Sitamarhi where a large crowd with drums, trumpets and flags escorted to the Subdivisional Officer's camp some persons accused

November.

of damaging *tar* trees in pursuit of the "temperance" campaign; and elsewhere in the Division Khilafat meetings were held at which inflammatory speeches were delivered to large audiences. The American temperance orator Mr. Johnson visited Orissa during the first half of this month, and addressed a large meeting at Cuttack, at which the District Magistrate presided. Mr. Johnson condemned picketting as improper, and the attempts of some non-co-operation leaders to make speeches were frustrated. Otherwise the meeting passed off quietly.

On November the 17th, the day on which His Royal Highness the Prince of Wales landed in Bombay a general *hartal* was observed throughout the province; but except at Cuttack, where the *hartal* lead to *hat* looting, the occasion was not marked by any outbreaks of lawlessness. The condition of the Tirhut division, however, continued to give cause for anxiety. Bazaars continued to be a source of trouble, and acts of incendiarism against European factories were again reported, an outhouse of Naraipore Factory and a shed in the compound of Sirkiah Factory being burnt. Illegal grazing of factory grass reserves was also reported to be prevalent. A meeting of the District Congress Committee was largely attended; civil disobedience was discussed and the state of feeling in Champaran generally was tense and excited. Elsewhere in Tirhut, Sitamarhi continued to be a storm centre. The Subdivisional Officer was boycotted on tour, and meetings continued to be held in the district at which inflammatory speeches were made. At Sonepur Fair owing to the precautionary measures taken there was no serious disturbance, though the arrest of four "national volunteers" for picketing a spirit shop aroused a noisy demonstration by a mob.

The Jharia Trade Union Congress held in the end of November and early December on the whole passed off quietly and probably did more good than harm in its effect on the labour question in the coal-fields. Although it naturally caused a good deal of excitement among the labourers, and was accompanied by one or two small disturbances, it afforded an opportunity for the colliery owners to speak in public to the colliery labour force, and the speech of the Chairman of the Mining Association appeared to create a favourable impression on the audience. Throughout the province, however, the approaching Royal visit was made the occasion for a revival of non-co-operation activity, directed partly to securing an effective *hartal* on December 22nd and 23rd, and partly to preparing for a

possible inauguration of civil disobedience. In Patna *hartal* placards were posted in all public places and also on the compound walls of many private houses including those of Europeans. Arrangements were also made for the recruitment of a central volunteer association known as the "Sevak Dal", and the introduction of civil disobedience was discussed in several non-co-operation meetings in different parts of the province. The "temperance" campaign was accompanied by arson and violence in some districts.

On the 10th December, various volunteer associations were declared as unlawful under the Criminal Law Amendment Act, and arrests were made during the next few days of several non-co-operation leaders throughout the province. A deputation of members of the Legislative Council, who had signed a temperate protest against the introduction of the Criminal Law Amendment Act, was then received by the acting Governor, and the severity of these measures was relaxed in the hope that moderate counsels would prevail. Orders were issued that further action should not be taken under the Criminal Law Amendment Act without reference to Government, that political offenders should receive special treatment in jails, and that they should be offered their release on their undertaking to refrain from picketing, the promotion of *hartals*, the recruitment of volunteers and the fostering of civil disobedience. These terms of release met, however, with general refusal from convicted prisoners, and preparations for the *hartal* continued in Patna and elsewhere; the spectacle of small processions carrying national flags and shouting *Gandhi Maharaj ki jai* or similar cries, became common in the leaders. A particular brutal outrage on the dead body of a spirit noisy demonstration in Sasaram on the arrest of some political larger towns and in many parts of the *mufassal*, and there was a vendor, to which a reference has already been made in Chapter V, took place at Ranchi at this time. A strike of the employés of the Peninsular Tobacco Company occurred in Monghyr; and in Sitamarhi at the end of the year the Sonbursa thana on the borders of the Nepal *Terai* was invaded by a mob who insulted the police, while in Sitamarhi itself the sub-jail was for a time practically in a state of mutiny. In Hajipur in the same district the thana compound was rushed by a mob who attempted to drive away by force beggars to whom alms were being distributed in honour of the Royal visit; a planter and his family were practically besieged by "volunteers"

December.

in their own bungalow, and raids were made on the Raghupur and Mahua thanas in the same district. An attempt to picket the Gaya civil courts on the opening day after the Christmas holidays was only frustrated by the despatch of troops the previous evening. Finally racial feeling played an important part in a strike on the East Indian Railway. An allegation which was found on subsequent enquiry to be unfounded that an Indian Railway subordinate had been thrown off a running train by a European driver, led to a strike at Jhajha which spread elsewhere. The strike was accompanied by violence at Sahebganj where the Deputy Commissioner of the Santal Parganas and the Superintendent of Police with a small force of armed police were attacked by a mob which they had some difficulty in pacifying. This strike has revived subsequent to the close of the year and has reached formidable dimensions. That it is largely based on racial feeling appears not only in the nature of the fresh incident to which it is alleged to owe its origin, but also in the demand of the Indian strikers to be treated on an equal footing, both as to pay and status with the Europeans and Anglo-Indian employés.

It was in the midst of this atmosphere of unrest and disturbance which marked the closing month of the year that the news was announced of the acceptance by His Majesty the King-Emperor of the resignation of Lord Sinha. Although it was well known in the province that Lord Sinha's health had been failing for some months, and that for the past few weeks he had been too ill to attend to his official duties, the news that his services were finally lost to the province came as a shock to men of all creeds and all parties. As the Governor of Bihar and Orissa, Lord Sinha has left a mark which is never likely to be effaced. His unfailing courtesy and tact, his determination to make the Reform Scheme a success so far as his own enthusiasm for India could make it, his absolute integrity, untainted either by personal ambition or by prejudice of race or creed, and an eloquence which owed its force not to conscious art but to the strength of the convictions from which it sprang, were qualities which, by enlisting the sympathy and respect of all moderate opinion in the province in this critical period of its history have provided a lasting cement for the structure of the new constitution. We have seen in the second Chapter indications of the solidity of the foundations of this structure, not

Resignation of Lord Sinha.

only in the universal interest displayed in the elections to the Legislative Council, but in the moderation and restraint, the high ideals and the sustained interest in public affairs which have on the whole marked the first sessions of this body. But it would be idle to deny that many of the occurrences summarized above mark the presence of a disturbing force of serious dimensions, which has threatened day by day to divert the natural and legitimate national aspirations of all classes of the electorate from constitutional channels to nothing less than anarchy, and which has resulted already in manifestations of disorder and of active disloyalty.

The visit of the Prince of Wales.

The strength of this movement was indicated in a forcible manner by the conditions which prevailed in Patna on the occasion of the visit of His Royal Highness the Prince of Wales on December the 22nd and 23rd. The representatives of the people, sitting in the Legislative Council, had accorded His Royal Highness a cordial vote of welcome, and in the gorgeous *pandal* on the *maidan*, erected with the money which the Council had voted, a large crowd of loyal citizens of the upper classes gave the Prince a reception which accorded with the traditions of a loyal and hospitable nation. But that morning every shop in the city was closed and shuttered; the main thoroughfares were almost empty; no vehicles plied for hire, and no crowd lined the streets along which the procession passed. The unlettered masses, whom not only their traditional loyalty to the Crown but even natural curiosity would in normal circumstances have attracted in tens of thousands to see the King-Emperor's heir, were represented by a small crowd which filled not a twentieth of the space allotted to them; and though later that day on the polo ground, and again on the day following at a garden-party given by the landowners of the province, small crowds of cultivators and the poorer classes were in evidence, it is safe to say that a minority even of the population of Patna, and an infinitesimal fraction of the population of the neighbouring districts took any part in the welcome which the Prince received.

The objects of the non-co-operation movement and its results.

This manifestation of discourtesy, if not of disloyalty, the significance of which needs no emphasis to those acquainted with the traditions and characteristics of the people of India was, as we have seen, deliberately organized by the non-co-operation party. There is no place in this

record of the administration of a single province for a description of the origin and growth of this party, which has already been described in the series of Reports on the administration of India as a whole prepared year by year for presentation to the British Parliament. * But it is important to emphasize both the ultimate object and the inevitable results of this movement, which the events of the past year have revealed in their true colours. It is impossible in this matter to isolate Bihar and Orissa from the rest of the Indian continent. The Moplah rising, the riots in Rai Bareilly, the street fighting in Calcutta and Bombay, the deliberate insult either offered or attempted to be offered in all parts of British India to the Royal visitor, the initiation of organized civil disobedience in the Guntur district of the Madras Presidency, and finally, subsequent to the period under review, the murderous assault on the police at Chaura Chauri in the United Provinces are the results of the same causes as the recent raids on police-stations in Tirhut, as the burning of Chautarwa factory and as the riots in Giridih. The difference is one not of quality but of degree, and the same political forces and the same organization are at work on the same economic and social background under the acknowledged leadership of the same personality. The avowed object of the movement is the paralysis and subversion of the existing Government, and it is to this end that all its activities legal or illegal have been directed. The abandonment of their profession by legal practitioners, the boycott of Government schools and the creation of independent village courts of justice have been advocated and organized, with the object not of improving education or of simplifying the administration of justice among the villagers, but of preparing an organization independent of the existing Government institutions and ready to take their place when *Swaraj* has been attained. From such steps as these the advocacy of civil disobedience, the refusal to pay taxes or revenue, to attend the courts or to take part in the administration of any function of the established Government is only a further stage in the same campaign.

As to the results of such a programme if it is allowed even a limited scope the facts speak for themselves, and it can now hardly be denied by any impartial mind that its further progress must inevitably lead to general disorder and bloodshed and to widespread

* See particularly Chapters II and III of "India in 1920."

misery amongst all classes and communities. The fact that educated public opinion in this province both within the Legislative Council and outside has hitherto failed fully to recognize for what it is and to accept the challenge thrown down by Mr. Gandhi and his followers may be ascribed mainly to the widespread conviction among the moderate and thoughtful elements in the province that the movement is foredoomed to failure; and there is a natural tendency amongst Indians who respect many of the ideals with which Mr. Gandhi's name is associated to shrink from a direct attack on a man who is, they feel, above all things a religious leader and an Indian who, however mistaken may be his judgment, has the interests of India at heart. But the time has come when moderate politicians must steel their hearts to share with the Governor in Council the heavy burden which his responsibility for the maintenance of law and order still imposes, if they wish to avoid the imputation that the opening period of representative government in Bihar and Orissa has been a partial failure. For a partial failure it will have been if the ensuing year is found to show that the elected representatives of the people are not yet strong enough to be prepared to shoulder a greater responsibility for government than they already bear.

APPENDIX I.

SOURCES AVAILABLE TO THE PUBLIC.

Chapter I.—Constitutional Changes.

Report on Indian Constitutional Reforms.

The Reports prepared for presentation to Parliament in accordance with the requirements of the 26th section of the Government of India Act for 1917-18, 1919, and 1923, by Professor Rushbrook Williams.

The Government of India Act (consolidated).

The Devolution Rules.

Chapter II.—The Legislative Council.

The Bihar and Orissa Legislative Council Debates.

Chapters III and IV.—Finance, and Government and Economic Problems.

The Bihar and Orissa Annual Land Revenue Administration Reports, Settlement Reports, Reports on Co-operative Societies, Reports of the Forest, Agricultural, Veterinary and Industries Department and Board's Report.

Notes on (1) Fisheries in Bihar and Orissa; (2) on the objects, organization and work of the Development of Industries, Bihar and Orissa; (3) on Technical Scholarships in Bihar and Orissa; (4) on the possibility of introducing white sugar manufacture into South Bihar.

Note on Cattle in Bihar and Orissa, 1914, by G. Milne, Esq., I.C.S.

Note by Captain P. B. Riley on the Origin and Development of the Civil Veterinary Department, Bihar and Orissa.

Proceedings of the Agricultural Conference held at Patna on July 11, 1921.

Monthly Rainfall Records of Daily Rainfall.

Season and Crop Report.

Chapter V.—Government and Social Problems.

Annual Reports on the Progress of Education in Bihar and Orissa, on the Administration of the Excise Department, on the Administration of Civil Justice, on the Administration of Criminal Justice, on the Jails of Bihar and Orissa, and on the Administration of the Police.

Chapter VI.—Local Self-Government and Public Health.

The Annual Resolutions of the Government of Bihar and Orissa on the working of Municipalities and on the working of District Boards in Bihar and Orissa.

The Proceedings of the Local Self-Government Committee, Ranchi, 1920.

The Report of the Committee appointed at the instance of the Government of India to study the system of Local Government in England and the Report to the Government of Bihar and Orissa submitted by J. D. Sifton, Esq., I.C.S., C.I.E., member of the above Committee.

The Proceedings of the Conference of the representatives of District Boards and Municipalities in Bihar and Orissa held in the Council Chamber, Patna, on the 7th to 10th November 1921; and the Report of the Sub-Committee of the Conference appointed to frame a scheme for the Public Health organization of the Province.

The Annual Sanitary Reports of the Province of Bihar and Orissa, particularly of the year 1920.

The Annual Vaccination Returns.

The Annual Reports of the Jharia Mines Board of Health.

The Resolution of the Government of India on Local Self-Government, dated the 16th May 1918.

The Annual Returns of the Hospitals and Dispensaries in Bihar and Orissa.

The Report on the Cholera Epidemic of 1921 in Bihar and Orissa, by the Director of Public Health.

The Triennial Report on the working of the Lunatic Asylums in Bihar and Orissa for the years 1918, 1919 and 1920 and previous Annual and Triennial Reports.

Note.—Other Reports published by the authority of the Government of Bihar and Orissa, which have not been utilized as sources owing to the omission of mention of the subjects dealt with therein in the present volume.

The Review of the Annual Report on the Administration of the Feudatory States of Orissa and Chota Nagpur.

Annual statistical information regarding the Income-tax Department.
Income-tax Administration Report (Triennial).
Salt Administration Report.
Annual statistics of the Stamp Department.
Stamp Administration Report (Triennial).
Maritime Trade Report.
Resolution on Inland Emigration.
Registration Report.
Registration (Statistical Return).
Report on the Archæological Survey, Central Circle.
Annual Report on Trans-Frontier Trade of Bihar and Orissa.
Annual Rainfall Tables for the monsoon.

APPENDIX II.

A.—List of Members of the Bihar and Orissa Legislative Council and of their constituencies.

Name of member.	Constituency.
The Hon'ble Mr. Sachchidanand Sinha, *President.*	Member of the Executive Council.
The Hon'ble Mr. H. McPherson, C.S.I.	Ditto ditto.
The Hon'ble Khan Bahadur Saiyid Muhammad Fakhr-ud-din	West Patna Muhammadan Rural.
The Hon'ble Mr. Madhusudan Das, C.I.E.	Orissa Division Non-Muhammadan Urban.
Mr. E. L. L. Hammond, C.B.E. ...	Nominated
Mr. J. D. Sifton, C.I.E.	Ditto.
Mr. H. K. Briscoe, C.I.E.	Ditto.
Mr. M. G. Hallett	Ditto.
Mr. J. A. Hubback	Ditto.
Mr. W. S. Bremner	Ditto.
Mr. H. Ll. L. Allanson	Ditto.
Mr. E. H. Berthoud, O.B.E. ...	Ditto.
Mr. J. F. Gruning, C.I.E.	Ditto.
Mr. V. H. Jackson	Ditto.
Col. H. Austen-Smith, C.I.E. ...	Ditto.
Mr. R. T. Dundas, C.I.E.	Ditto.
Babu Shyam Narayan Sinha Sharma	Patna Division Non-Muhammadan Urban.
Mr. Muhammad Yunus	Patna Division Muhammadan Urban.
Raja Harihar Prashad Narayan Singh, O.B.E.	Patna Division Landholders.
Rai Sahib Ram Gopal Singh Chaudhuri.	Patna Non-Muhammadan Urban.
Babu Mithila Sharan Sinha ...	West Patna Non-Muhammadan Rural.
Babu Ganesh Datta Singh	East Patna Non-Muhammadan Rural.
Maulavi Saiyid Muhammad Husain ...	East Patna Muhammadan Rural.
Babu Chhote Narayan Singh ...	West Gaya Non-Muhammadan Rural.

Name of member.	Constituency.
Rai Bahadur Kashi Nath Singh ...	Central Gaya Non-Muhammadan Rural.
Babu Rameshvar Prashad Singh ...	East Gaya Non-Muhammadan Rural.
Maulavi Malik Mukhtar Ahmad ...	Gaya Muhammadan Rural.
Babu Dvarika Prashad Singh ...	Arrah Non-Muhammadan Rural.
Maharaja Bahadur Guru Mahadev-asram Prashad Sahi.	Central Shahabad Non-Muhammadan Rural.
Babu Rajivaranjan Prashad Sinha ...	South Shahabad Non-Muhammadan Rural.
Maulavi Hafiz Nurul Haqq	Shahabad Muhammadan Rural.
Rai Bahadur Dvarika Nath ...	Tirhut Division Non-Muhammadan Urban.
Khan Bahadur Saiyid Ahmad Husain.	Tirhut Division Muhammadan Urban.
Babu Krishnadeva Narayan Mahtha	Tirhut Division Landholders.
Babu Madhaveshvarendra Sahi ...	North Saran Non-Muhammadan Rural.
Babu Nirsu Narayan Sinha ...	South Saran Non-Muhammadan Rural.
Maulavi Saiyid Mubarak Ali ...	Saran Muhammadan Rural.
Babu Lakshmi Mohan Misra ...	North Muzaffarpur Non-Muhammadan Rural.
Babu Ambika Prashad Upadhyaya . .	North Champaran Non-Muhammadan Rural.
Maulavi Saiyid Abbas Ali ...	Champaran Muhammadan Rural.
Babu Maheshvar Prashad Narayan Singh.	North Muzaffarpur Non-Muhammadan Rural.
Chaudhuri Raghunandan Prashad Sinha.	East Muzaffarpur Non-Muhammadan Rural.
Babu Kapildeva Sahay	West Muzaffarpur Non-Muhammadan Rural.
Babu Radha Krishna	Hajipur Non-Muhammadan Rural.
Maulavi Saiyid Mehdi Hasan ...	Muzaffarpur Muhammadan Rural.
Babu Raghunbans Thakur	North-West Darbhanga Non-Muhammadan Rural.
Babu Shiva Shankar Jha	North-East Darbhanga Non-Muhammadan Rural.
Babu Ram Nihora Singh	South-East Darbhanga Non-Muhammadan Rural.

Name of member.	Constituency.
Babu Kameshvar Narayan Sinha ...	Samastipur Non-Muhammadan Rural.
Maulavi Letafat Husain Khan ...	Darbhanga Muhammadan Rural.
Babu Jyotish Chandra Bhattacharji	Bhagalpur Division Non-Muhammadan Rural.
Khan Bahadur Saiyid Muhammad Tahir.	Bhagalpur Division Muhammadan Rural.
Raja Bahadur Kirtyanand Singh ...	Bhagalpur Division Landholders.
Swami Vidyanand *alias* Bishva Bharan Prashad.	North Bhagalpur Non-Muhammadan Rural.
Babu Bhuvaneshvari Prashad Mandal	Central Bhagalpur Non-Muhammadan Rural.
Babu Sukh Raj Ray	South Bhagalpur Non-Muhammadan Rural.
Khan Bahadur Saiyid Muhammad Naim.	Bhagalpur Muhammadan Rural.
Babu Devakinandan Prashad Singh ...	East Monghyr Non-Muhammadan Rural.
Rai Sahib Kharag Narayan	North-East Monghyr Non-Muhammadan Rural.
Maharaj-Kumar Chandra Mauleshvar Prashad Singh.	South-West Monghyr Non-Muhammadan Rural.
Mr. Shah Muhammad Yahya ...	Monghyr Muhammadan Rural.
Rai Bahadur Prithi Chand Lal Chaudhuri.	Purnea Non-Muhammadan Rural.
Mr. Saiyid Moin-ud-din Mirza ...	Kishanganj Muhammadan Rural.
Maulavi Mir Faiyaz Ali	Purnea Muhammadan Rural.
Babu Jogendra Narayan Singh ...	Santal Parganas (North) Non-Muhammadan Rural.
Babu Satya Narayan Sinha ...	Santal Parganas (South) Non-Muhammadan Rural.
Maulavi Muhammad Umid Ali ...	Santal Parganas Muhammadan Rural.
Maulavi Shaikh Abdul Majid ...	Orissa Division Muhammadan Rural.
Babu Charu Chandra Rai Chaudhuri	Orissa Division Landholders.
Babu Birabar Narayan Chandra Dhir Narendra.	North Cuttack Non-Muhammadan Rural.
Babu Rebati Kanta Ghosh	South Cuttack Non-Muhammadan Rural.
Rai Bahadur Harendra Narayan Ray Mahasay.	North Balasore Non-Muhammadan Rural.
Chaudhuri Bhagabat Prashad Samantarai Mahapatra.	South Balasore Non-Muhammadan Rural.

Name of member.	Constituency.
Babu Pitabas Patnaik	North Puri Non-Muhammadan Rural.
Mahanth Gadadhar Ramanuj Das ...	South Puri Non-Muhammadan Rural.
Babu Shankar Prashad Misra ...	Sambalpur Non-Muhammadan Rural.
Rai Bahadur Radha Gobind Chaudhuri.	Chota Nagpur Division Non-Muhammadan Urban.
Khan Bahadur Khwaja Muhammad Nur.	Chota Nagpur Division Muhammadan Rural.
Kumar Thakurai Girivar Prashad Singh.	Chota Nagpur Division Landholders.
Rai Bahadur Sharat Chandra Ray ...	Ranchi Non-Muhammadan Rural.
Rai Bahadur Gopi Krishna	Hazaribagh Non-Muhammadan Rural
Babu Devaki Prashad Sinha ...	Palamau Non-Muhammadan Rural.
Babu Shivadas Banarji	North Manbhum Non-Muhammadan Rural.
Rai Bahadur Jyotirmay Chattarji ...	South Manbhum Non-Muhammadan Rural.
Dulu Manki	Singhbhum Non-Muhammadan Rural.
Mr. P. K. Sen	Patna University.
Mr. P. Kennedy	European Constituency.
Mr. J. V. Jameson	Planting Constituency.
Mr. J. H. Pattinson	Indian Mining Association.
Babu Umesh Chandra Banarji ...	Indian Mining Federation.
Maharaja Bahadur Sir Ravaneshvar Prashad Singh, K.C.I.E.	Nominated.
Mr. Saiyid Hasan Imam ...	Ditto.
Rai Bahadur Purnendu Narayan Sinha.	Nominated (Domiciled Bengali Community).
Mr. F. E. L. Morrison	Nominated (Anglo-Indian Community).
Rev. Emanuel Sukh	Nominated (Depressed Classes).
Babu Bishvanath Kar	Ditto.
Rev. E. H. Whitley	Nominated (Aborigines).
Mr. Dhan Masih Panna	Ditto.
Mr. Baij Nath	Nominated (Labouring Classes).
Mr. Dhanjishah Meherjibhai Madan	Nominated (Industrial interests other than planting and mining).
Rev. Prittam Luther Singh ...	Nominated (Indian Christian Community).
Mr. S. B. Dhavle, *Secretary* ...	Nominated.

B.—List of Members of the Council of State representing Bihar and Orissa.

(a) Elected.

Name of member.	Constituency.
Maharajadhiraja Sir Rameshwara Singh, G.C.I.E., K.B.E., of Darbhanga.	Bihar and Orissa (Non-Muhammadan).
The Hon'ble Maharaja Bahadur Keshava Prasad Singh, C.B.E., of Dumraon.	Ditto.
The Hon'ble Khan Bahadur Saiyid Zahir-ud-din.	Bihar and Orissa (Muhammadan).

(b) Nominated.

The Hon'ble Mr. Henry Telford Stonor Forrest, I.C.S.

C.—List of Members of the Legislative Assembly representing Bihar and Orissa.

(a) Elected.

Babu Baidyanah Prashad Singh, Kaliani, Muzaffarpur.	Tirhut Division (Non-Muhammadan).
Babu Adit Prashad Sinha, Bela House, Darbhanga.	Ditto.
Babu Braja Sunder Das, Chaudhuri Bazar, Cuttack.	Orissa Division (Non-Muhammadan).
(Election pending)	Ditto.
Babu Ambika Prashad Sinha, Patna	Patna cum Shahabad (Non-Muhammadan).
Rai Bahadur Lachmi Prashad Sinha, Monghyr.	Gaya cum Monghyr (Non-Muhammadan).
Rai Bahadur Nishikanta Sen, Sen Villa, Purnea.	Bhagalpur, Purnea and the Santal Parganas (Non-Muhammadan).
Rai Bahadur Sarat Chandra Sen, Vakil, Purulia (Dist. Manbhum).	Chota Nagpur Division (Non-Muhammadan).
Khan Bahadur Saiyid Muhammad Ismail, Guzri, Patna City.	Patna and Chota Nagpur cum Orissa (Muhammadan).
Maulavi Miyan Asjad-ul-lah, Zamindar and Honorary Magistrate, Kishenganj.	Bhagalpur Division (Muhammadan).
Khan Bahadur Sarfaraz Husain Khan, Haveli Begam, Patna City.	Tirhut Division (Muhammadan).
Raja Rajendra Narayan Bhanja, O.B.E. of Kanika.	Bihar and Orissa Landholders.

(*b*) *Nominated.*

Name of member.	Constituency.
Khan Bahadur Muhammad Habib-ul-lah.	

D.—List of Officers of the Bihar and Orissa Legislative Council.

The Hon'ble Mr. Sachchidananda Sinha, *President.*

Mr. S. B. Dhavle, I.C.S., *Secretary.*

Mr. G. A. Samuel, B.A., LL.B., Bar-at-law, *Assistant Secretary.*

E.—(a) Members of the Executive Council of Bihar and Orissa.

The Hon'ble Mr. H. McPherson, C.I.E. I.C.S.

The Hon'ble Mr. Sachchidananda Sinha.

(*b*) *Ministers.*

The Hon'ble Khan Bahadur Saiyid Muhammad Fakhr-ud-din, Ministry of Education.

The Hon'ble Mr. Madhusudan Das, Ministry of Local Self-Government.

F.—Copy of Notification showing the distribution of business between His Excellency the Governor and the Members of his Council.

GOVERNMENT OF BIHAR AND ORISSA.

APPOINTMENT DEPARTMENT.

APPOINTMENT BRANCH.

ORDER.

Ranchi, the 21st May 1921.

Under Rule 2 of the Rules of Business made under Section 49 of the Government of India Act, and in supersession of all previous orders on the subject, His Excellency the Governor is pleased to direct that the business of the different departments relating to the Central and Reserved subjects shall be allotted to the Governor and the Members of his Council as follows:—

HIS EXCELLENCY THE GOVERNOR.

I.—APPOINTMENT DEPARTMENT.

1. Appointments shown in List I mentioned in Rule 7 of the Rules of Business.

2. Appointments of members of the Indian Civil Service and to listed posts.

3. His Excellency's personal staff.

II.—Political Department.

1. Darbars and Titles.

N.B.—His Excellency will deal himself with the expenditure of the grants for the upkeep of Government Houses.

THE HON'BLE SIR HAVILLAND LeMESURIER.

I.—Appointment Department.

All subjects not taken by His Excellency.

II.—Education Department.

1. Ecclesiastical administration, including European cemeteries.

2. Archaeology.

3. Treasure Trove.

4. Languages and Linguistic Survey.

5. Ethnology and Ethnography.

6. Chiefs' Colleges.

7. European and Anglo-Indian Education.

8. Reformatory Schools.

III.—Financial Department.

The whole, except transferred subjects and the subjects allotted to the Hon'ble Mr. Sachchidananda Sinha.

THE HON'BLE Mr. H. McPHERSON.

I.—Political Department.

All subjects not taken by His Excellency.

II.—Revenue Department.

The whole, except the transferred subjects and the subjects allotted to the Hon'ble Mr. Sachchidananda Sinha.

III.—Public Works Department.

1. The disposal of vacant sites, being the property of Government in the New Capital at Patna and elsewhere.

2. The administrative charge of Government residences in the New Capital, Patna, and at Ranchi.

4. The administrative charge of the Legislative Council Chamber at Patna.

3. The administrative charge of the Secretariats at Patna and at Ranchi.

THE HON'BLE MR. SACHCHIDANANDA SINHA.

I.—REVENCE DEPARTMENT.

1. Provident Assurance Societies and Life Assurance Companies.
2. Joint Stock Companies.
3. Census.
4. Books, Periodicals and Newspapers.
5. Circuit Houses.
6. Administration Report.
7. Libraries, maintained for official use only in the Secretariat and in the offices of the Board of Revenue, Commissioners of Divisions and District offices.
8. Supply of publications.

II.—JUDICIAL DEPARTMENT.

The whole.

III.—FINANCIAL DEPARTMENT.

All subjects dealt with in the Jails and Commerce Branches except Excise.

IV.—MUNICIPAL DEPARTMENT.

1. Control of Motor Vehicles.
2. Control of Poisons.

V.—PUBLIC WORKS DEPARTMENT.

The whole, except the transferred subjects and the subjects allotted to the Hon'ble Mr. McPherson.

By order of His Excellency the Governor,

G. RAINY,

Chief Secretary to Government.

NOTE.—His Excellency, the Acting Governor, was still in charge of the subjects included in his portfolio as Hon'ble Member at at the close of the year under review.

APPENDIX III.

Instructions to Governors.

GEORGE R. I.

Instructions to the Governor or acting Governor for the time being of the Province of Bihar and Orissa.

Whereas by the Government of India Act provision has been made for the gradual development of self-governing institutions in British India with a view to the progressive realization of responsible government in that country as an integral part of Our Empire;

And whereas it is Our will and pleasure that in the execution of the office of Governor in and over the Province of Bihar and Orissa, you shall further the purposes of the said Act to the end that the institutions and methods of Government therein provided shall be laid upon the best and surest foundations, that the people of the said Province shall acquire such habits of political action and respect such conventions as will best and soonest fit them for Self-Government, and that Our authority and the authority of Our Governor-General in Council shall be duly maintained;

Now therefore we do hereby direct and enjoin you and declare Our will and pleasure to be as follows:—

I. You shall do all that lies in your power to maintain standards of good administration; to encourage religious toleration, co-operation and good-will among all classes and creeds; to ensure the probity of public finance and the solvency of the Province; and to promote all measures making for the moral, social, and industrial welfare of the people, and tending to fit all classes of the population without distinction to take their due share in the public life and Government of the country.

II. You should bear in mind that it is necessary and expedient that those now and hereafter to be enfranchised shall appreciate the duties, responsibilities and advantages which spring from the privilege of enfranchisement; that is to say, that those who exercise the power henceforward entrusted to them of returning representatives to the Legislative Council, being enabled to perceive the effects of their choice of a representative, and that those who are returned to the Council, being enabled to perceive the effects of their votes given therein,

shall come to look for the redress of their grievances and the improvement of their condition to the working of representative institutions.

III. Inasmuch as certain matters have been reserved for the administration according to law of the Governor in Council, in respect of which the authority of Our Governor-General in Council shall remain unimpaired, while certain other matters have been transferred to the administration of the Governor acting with a Minister, it will be for you so to regulate the business of the Government of the Province that, so far as may be possible, the responsibility for each of these respective classes of matters may be kept clear and distinct.

IV. Nevertheless you shall encourage the habit of joint deliberation between yourself, your Councillors and your Ministers, in order that the experience of your official advisers may be at the disposal of your Ministers, and that the knowledge of your Ministers as to the wishes of the people may be at the disposal of your Councillors.

V. You shall assist Ministers by all the means in your power in the administration of the transferred subjects, and advise them in regard to their relations with the Legislative Council.

VI. In considering a Minister's advice and deciding whether or not there is sufficient cause in any case to dissent from his opinion, you shall have due regard to his relations with the Legislative Council and to the wishes of the people of the Province as expressed by their representatives therein.

VII. But in addition to the general responsibilities with which you are, whether by statute or under this instrument, charged, We do further hereby specially require and charge you:—

(1) to see that whatsoever measures are, in your opinion, necessary for maintaining safety and tranquillity in all parts of your Province and for preventing occasions of religious or racial conflict, are duly taken, and that all orders issued by Our Secretary of State or by Our Governor-General in Council on Our behalf to whatever matters relating are duly complied with;

(2) to take care that due provision shall be made for the advancement and social welfare of those classes amongst the people committed to your charge, who, whether on account of the smallness of their number or their lack of educational or material advantages or from any other cause, specially rely upon Our protection, and cannot as yet fully rely for their welfare upon joint political action, and that such classes shall not suffer, or have cause to fear, neglect or oppression;

(3) to see that no order of your Government and no Act of your Legislative Council shall be so framed that any of the diverse interests of or arising from race, religion, education, social condition, wealth or any other circumstances, may receive unfair advantage, or

may unfairly be deprived of privileges or advantages which they have heretofore enjoyed, or be excluded from the enjoyment of benefits which may hereafter be conferred on the people at large;

(4) to safeguard all members of Our services employed in the said Province in the legitimate exercise of their functions, and in the enjoyment of all recognised rights and privileges, and to see that your Government order all things justly and reasonably in their regard, and that due obedience is paid to all just and reasonable orders and diligence shown in their execution;

(5) to take care that, while the people inhabiting the said Province shall enjoy all facilities for the development of commercial and industrial undertakings, no monopoly or special privilege which is against the common interest shall be established and no unfair discrimination shall be made in matters affecting commercial or industrial interests.

VIII. And we do hereby charge you to communicate these Our Instructions to the Members of your Executive Council and your Ministers and to publish the same in your Province in such manner as you may think fit.

APPENDIX IV.

The Address presented to His Royal Highness the Prince of Wales on the occasion of his visit to Patna on December the 22nd, and the reply delivered by His Royal Highness.

To

His Royal Highness Edward Albert Christian George Andrew Patrick David, Prince of Wales, K.G., G.C.S.I., G.C.M.G., G.C.I.E., G.B.E., M.C.

MAY IT PLEASE YOUR ROYAL HIGHNESS,

ON behalf of the people of Bihar and Orissa, we offer Your Royal Highness a most cordial welcome on this, the most auspicious, occasion of your first visit to the metropolis of our ancient and historic province. The ancient city of Pataliputra, now known as Patna, which was once the capital of the great Empire of Chandra Gupta and his world-famous grandson—Asoka the Great—most heartily welcomes to-day the heir to the throne of the greatest commonwealth of the modern world. It is a truism that the political history of India opens, in the fourth century before the Christian era, in this very city of Patna as the metropolis of the great Mauryan Empire of Chandra Gupta, who had at his court Megasthenes, as the famous Ambassador of Selukos Nikator, the Greek King of Bactria. As regards the still existing monuments of Asoka's beneficent rule, Your Royal Highness will, in the course of your tour, no doubt, see some of the magnificent monoliths reared by that great Beharee Emperor, on which he inscribed his famous Royal edicts laying down golden rules of conduct, which even we of the twentieth century would do well to constantly keep in mind. Not far from here—in the neighbouring district of Gaya—there is the ancient Buddhist temple at Budh Gaya, which is traditionally associated with the name of Asoka the Great. It is not only a unique object of antiquarian and architectural interest, but is admittedly the most sacred spot in the Buddhist world, as marking the site where Lord Buddha attained *Nirvana*, that is became "enlightened" and is, as such, the point of convergence to the votaries of the Master throughout the world. The Province of Orissa, which is now joined to Bihar, for administrative purposes, has been for ages out of mind the sacred land of the Hindus and contains, besides many glorious monuments of Hindu architecture, the well-known temple of Jaggannath at Puri, which annually draws large congregations of pilgrims from all parts of the country.

We recall with gratification the fact that at this identical spot, where Your Royal Highness is receiving our address of welcome, your august grandfather Edward VII—the first Emperor of a truly unified India—held a Darbar, when he came to this country as Prince of Wales, in 1875. Your Royal father—our gracious King-Emperor—came here in 1911 and inspected the whole length of the river-view of this city which he, by his Royal Command announced but a few days before at Delhi, had raised to the dignity of the capital of Bihar and Orissa. With the example of the great interest displayed by Your Royal grandfather and father in our fortunes, it was in the fitness of things that Your Royal Highness should be in our midst to-day to see for yourselves the progress made by the metropolis of this Royal Province.

Ten years have now elapsed since your august father, our beloved King-Emperor, made the momentous announcement at the Delhi Darbar of 1911, of his intention to establish the new province of Bihar and Orissa under the administration of a Lieutenant-Governor in Council. Since the inception of British dominion in 1765, we formed, till then part of the old historic provinces of Bengal, Bihar and Orissa. The intention of His Majesty the King-Emperor, in sanctioning the creation of our province was to give the Beharees and the Uriyas much greater facilities than existed before for furthering their advancement educationally, economically and politically. As the people of Bihar and Orissa had long been desirous of having a separate self-contained administration of their own, they received the gracious Royal message with hope, rejoicing and a sense of profound gratefulness. We are glad to assure Your Royal Highness that our high expectations have been already, to a large extent, fulfilled. Though handicapped by a lack of financial resources, the province of Bihar and Orissa has made during the last ten years sure and steady progress. In point of population it stands fourth among the provinces of the Indian Empire. It is now equipped with almost all the political and legal institutions of a major province; and those still required to make it completely self-contained are for the teaching of the higher branches of medicine, engineering and technology. Thus our people are at last enjoying the benefits of a very nearly, self-contained and progressive administration, which with its seat of Government at Patna is fully and equally in touch with all parts of the territories under its control. Though much has been done in the first decade of the life of Bihar and Orissa as a province, we are aware that very much more yet remains to be done. But we feel sure that our Local Government, even more so in future than in the past, will be unremitting in their efforts, so far as financial resources will permit them, in advancing education, especially technical and industrial, and in promoting measures tending to improve public health; as also in providing greater facilities for trade by opening communications throughout the province, and in developing the ports in Orissa for the expansion of commerce.

SINCE the 29th of December last, the status of our province has been raised by its elevation to a Governorship, and we take it as an expression of His Majesty the King-Emperor's gracious sympathy with the struggles of his people, in this Royal province, for a higher civic life, that ours is the only province in the Indian Empire to have had the unique and signal honour conferred upon it of being administered by an Indian Governor. The appointment of His Excellency the Right Hon'ble Baron Sinha of Raipur as the first Indian representative of His Majesty gave our people unbounded satisfaction and genuine gratification, and it is to us a matter of profound regret that owing to ill-health His Excellency Lord Sinha could not be present here to-day to accord to Your Royal Highness welcome in the name and on behalf of the Province, which we know he had been looking forward to with keen interest. The elevation of the status of our province is the direct result of the introduction into the Government of this country of the Reforms associated with the names of the Right Hon'ble Edwin Samuel Montagu—His Majesty's Secretary of State for India—and the late Viceroy, Lord Chelmsford. We may take this occasion to inform Your Royal Highness that the Reforms scheme has been welcomed throughout this province as giving the people opportunities, which they lacked so far, of qualifying themselves, as soon as practicable, for full responsible Government. We desire to assure Your Royal Highness that our people have fully availed themselves of the opportunities now opened to them and they are working in a spirit of conciliation and good will, so that by making the Reforms scheme—which is admittedly meant for a period of transition—a thorough success, they may be able to justify their claims, at an early date, to a very much greater measure of civic freedom and political responsibility.

IT will interest Your Royal Highness to know that Bihar and Orissa is the wealthiest province, in the Indian Empire, in mineral resources. But it is only during recent years that efforts have been made to develop them. Lately the Local Government have directed their especial attention to the development of our provincial industries and it is to be hoped that, in the near future, this province will have made sufficient progress in the expansion of its cottage industries as also in the establishment of large concerns worked by power. Of the many industries now established in the province, we may especially mention the Tata Iron and Steel Works at Jamshedpur which are justly associated with the honoured and revered name of that greatest Captain of Indian Industry—the late Mr. Jamshedji Tata. This large and important concern, which to a large extent utilises the iron ores of Orissa, is noteworthy for its being purely Swadeshi, in the sense that the whole of its large capital was raised in the country and the whole organization bears emphatic testimony to the enterprise of educated Indians and their capacity for carrying on important industrial concerns.

In conclusion, we beg of Your Royal Highness to convey to His Majesty the King-Emperor an assurance of our fervent loyalty to his Person and Throne and our deep-seated and earnest conviction that the realization by the people of India, in the near future, of Swaraj, as an integral part of the Great British Commonwealth, is indissolubly bound up with the continuance of the beneficent sway of Your Royal House over the Indian Empire. We also desire to assure Your Royal Highness that the people of this Province have felt sincerely gratified at the visit which you have been pleased to pay to their metropolis, as they believe that the experience gained by you of the realities of life in the India of to-day will enable Your Royal Highness to appreciate more keenly than before their many pressing and crucial problems, as also to realize more vividly the trend of those political, social and economic forces, that have come into play in their midst, as the result of the everwidening influence of education through the medium of English, and are now daily moulding for the better the destinies of this ancient and magnificent land. We hope Your Royal Highness will carry away with you pleasant recollections of your short stay in the capital of our Province and will continue to take a sympathetic and an abiding interest in the fortunes of its people.

We beg to subscribe ourselves,

THE CITIZENS OF BIHAR AND ORISSA.

Gentlemen,

I thank you most warmly for the kind address which your Committee, representing so many varied interests and communities in this Province, has presented to me. I shall convey to His Majesty the King-Emperor the expression of your loyal devotion.

I am very glad to have been able to visit Patna. Though your province is the youngest province in India, Patna and Rajgir are connected with the mists of ancient history and the dawn of old civilzations and Empires. The sacred places of Budh Gaya and Jagannath recall associations with two of the dominating systems of religious belief in the East, while in the Public Library at Patna is stored a treasure of literature dealing with the religion and history of the Moslem peoples of the world. On historical and religious grounds, therefore, your Province occupies a position of more than common interest.

Apart from these features, my visit makes a special appeal to me because Patna was visited by my grandfather and by my father; and it is by my father's command that this Province took its present shape as a separate entity, and that Patna became the metropolis of a Local Government.

In addition to this I am gratified to visit a Province where till recently an Indian, after a distinguished career in India and in England, and after rendering conspicuous service to the Empire in the War, held the high position

of Governor. I am proud to think that Lord Sinha stood, marked out by the confidence of His Majesty's Government, as head of a Local Administration in the ranks of those who are next to and only below His Majesty the King-Emperor's Viceroy and Governor-General in India. It is with deep regret that I have heard of Lord Sinha's illness and resignation; and it is a great disappointment to me not to have been able to see him here in his own Administration and at the head of his own Province. I deem your province fortunate to have been the first to receive the most signal proof of that trust in the people of India and that desire to associate Indians more closely with the Government in India, which has been repeatedly announced and affirmed by His Majesty the King-Emperor.

This province is possessed of vast resources and wealth. I need only mention a few of its products,—the output of white sugar, the lac industry, the mineral deposits in iron, steel, coal, copper and mica and the manufacture of country cloth. Under the reformed constitution the future of this fair province lies to a large extent in the hands of the enlightened classes among the people themselves. It is my prayer that you may be rightly inspired to develop and improve your resources and to promote the well-being of your fellow-citizens in Bihar and Orissa.

I know that I shall take away the most pleasant recollections of my visit to Patna; and you may count on the warm interest with which I shall always watch and follow the future history and fortunes of your Province.

APPENDIX V.

The Speech delivered by His Excellency The Right Hon'ble Satyendra Prasanna Baron Sinha of Raipur, at the inauguration of the Legislative Council of Bihar and Orissa on February the 7th, 1921.

Mr. President and members of the Legislative Council of Bihar and Orissa,

I consider it a great privilege that in the performance of the high office which His Majesty the King-Emperor has graciously bestowed on me, it is my duty to-day to open this Council and to join with you all in a heart-felt prayer for guidance in your labours for the benefit of all classes, creeds and communities in this Province.

I am filled with gratitude that we witness to-day the beginning of representative government, a system of government which the experience of more fortunate countries has proved to be the highest ideal of polity and one best calculated to promote the greatest happiness of the greatest number. And I trust that I may be pardoned if I recall with pride the fact that it is my unique good fortune to have borne a share, however small, in the deliberations which led to the famous declaration of the 17th August, 1917, in the investigations which followed that memorable pronouncement and the proceedings in Parliament which resulted in the statute of 1919, and the rules and regulations under that Act. I do not claim that they constitute a revolutionary change in the constitution, but I assert that they are the logical and the inevitable outcome of the beneficent labours of many generations of English and Indian statesmen and administrators.

I cannot help thinking that the shades of Munro, Macaulay, Elphinstone, Bright and Ripon join to-day with those of Ram Mohan Roy, Naoroji, Ranade, Pherozeshah Mehta and Gokhale and others of revered memory in sending their benedictions on this assembly.

I have said that the change in the constitution is not revolutionary. It would indeed be of little lasting benefit if it was. Continuity is the first necessity for the life of the state, and change is essential to the health of all forms of the life of society. The problem in every field—whether politics, literature, or religion—is the same, that of finding continuity in progress. I claim for the new system that it is both progressive and continuous, involving no violent breaking away from the past and ensuring that stability which is the most important of all elements of political strength. It is not to be expected

that opinion should be unanimous with regard to either of these characteristics of the new constitution. I will not attempt to meet the criticism which has been so freely bestowed upon it from both sides—one denying that it is continuous and the other alleging that it is not progressive. But there is no gainsaying the fact that these Councils have become more and more representative and that their authority and influence has increased with the increase, in their representative character.

About sixty years ago, a small non-official element was introduced into the provincial Councils by nomination in order to ascertain non-official opinion on projects of legislation only. The number of such nominated members was gradually increased, but it was not till 1909 that the principle of election was avowedly introduced, though the elected members were still left in a minority and the elections were for the most part indirect, through district boards and municipalities.

The new system introduces the method of direct election by the people grouped under different territorial constituencies. Whereas under the old system the number of voters was only 2,404, consisting as follows:—

Municipal Commissioners	620
District Board Members	262
Land-holders	321
Muhammadans	1,201
Total ...	2,404

we have under the new system—

Non-Muhammadan rural voters ...	253,044
Non-Muhammadan urban voters ...	38,992
Muhammadan rural voters ...	24,919
Muhammadan urban voters ...	8,338
Total ...	325,293

without taking into account the European, land-holders' and special constituencies whose votes are 1,463, 370 and 1,548 respectively. If representative government, *i.e.*, that form of it which is called responsible government, is the end desired, the primary necessity is to create a sufficiently large and intelligent electorate. Who will deny that an increase from 2,404 to

328,674 is a substantial increase? Ought it to have been further increased? I think I can safely say that the substantial majority of opinion is against any such idea under existing circumstances, and I venture to remind you of the weighty words of John Stuart Mill in this connection. 'Representative institutions', he pointed out, 'are of little value when the generality of electors are not sufficiently interested in their own Government to have their vote, or if they vote at all, do not bestow their suffrages on public grounds but sell them for money, or vote at the beck of some one who has control over them, or whom for private reasons they desire to propitiate. Popular Government, as thus practised, instead of being a security against misgovernment, is but an additional wheel in its machinery.'

I assert with confidence that we have got the best electorates possible under present conditions. Have we got the best Council possible? Those who have set themselves up as irreconcilable opponents of the system inaugurated to-day proclaim loudly that this Council is not representative. Of course here and there there are men whose presence in this Council would be welcome and a source of strength, who are to-day outside. But that is the case wherever representative institutions exist. But if we want to satisfy ourselves impartially and honestly that a large proportion of the best men of the Province are in this Council, we have only to look round this chamber, and I congratulate the Province that in spite of many adverse circumstances, over 40 per cent. of the voters went to the poll in contested elections, and that they succeeded in returning such a number of able, zealous and patriotic members.

The next point that I desire to touch upon is the power this Council has for the first time in relation to the budget. With a very few exceptions, the necessity for which is universally admitted, all proposals of the Local Government for the appropriation of public revenues and other moneys every year must be submitted to the vote of the Council in the form of demands for grants, and the Council may assent or refuse its assent to a demand or reduce the amount. Only those who have any experience of the working of responsible government can realize the transference of power from the Executive to the Council which this provision involves. Those, who contend that the power reserved to the Governor to disregard such vote under strictly limited conditions detracts to any appreciable extent from the reality of the power conceded to the Council, seem to be determined either to ignore the realities of the situation or deliberately to mislead public opinion.

The only other point that I would draw your attention to is what has been called the keynote of these reforms, the complete control conceded to the Council over the administration of some of the most important departments of Government, compendiously called the Transferred Subjects. These have been felicitously described as the "nation-building activities of the Government". These are, broadly speaking, Education, Public Health and Medical Relief,

Industries (including Agriculture), Local Self-Government and Excise. For the administration of these departments, I have chosen as my colleagues two of your fellow-members with varied knowledge and wide experience, who, I have every reason to believe, possess your confidence and are likely to pursue a policy in accordance with your reasonable desires. But I do most earnestly commend you not to expect great results in the immediate present from the Ministers. They have very big difficulties to face and they may find them insuperable if the Council insist on thrusting them into policies before they have had time to make themselves thoroughly acquainted with the details of administration and the directions along which it is possible to advance. We want reform based on knowledge and experience rather than on impatient idealism. The one will be steadily progressive, the other will lead to confusion and ultimate disaster. You are all aware that in their first report, dated 17th November 1919, the Joint Committee of Parliament strongly recommended that the Governor should foster the habit of free consultation between both halves of his Government and indeed that he should insist upon it in all matters of common interest. His Majesty the King-Emperor's Instructions to me also lay the same injunction upon me and I have commenced to give effect to these Instructions in the actual conduct of business, so that the experience of the Members of the Executive Council is at the disposal of the Ministers in the same way that the knowledge of the Ministers as to the wishes of the people is at the disposal of the Members of the Executive Council.

Gentlemen, we are passing through a period of general strain and excitement. The cataclysm of war cannot subside by magic into universal harmony. Past injustices and errors, equally with sonorous phrases full of promise for the future, have caused a widespread longing for a new heaven and a new earth, and people are finding it difficult to separate the wheat from the chaff—the attainable from the impracticable. There is great confusion of thought and consequent waste of energy and effort. The air is thick with plans for the development of education on national lines. Surely this does not mean an abandonment of modern education, which is no more English than it is French, German or Japanese. The country is invited to take to the spinning-wheel as the surest method of developing national industries; and social reform by way of temperance is sought to be promoted by methods, some of which, at any rate, must come into collision with law and order. If the direct object of all these movements were the amelioration of the people and not the destruction of Government, I am confident they would appeal to the members of this Council whose special functions are to advance education, promote industries and develop social well-being. But I cannot believe that you will seek to carry out that policy by banishing all modern culture from our schools and colleges, by paralysing the growing industries of the country or by trying to create habits of temperance by means other than a well-considered

excise policy regulating control, manufacture, possession and sale of alcoholic liquor and intoxicating drugs. It is for you to choose. The policy regulating all these matters must be framed in general consonance with your wishes to the extent they coincide with the wishes of the people. I can only say, using words lately used by that veteran Bombay educationist, Professor Paranjpye—'Remember that it is not always easy to remedy defects without introducing other and greater defects in their place'.

There is another matter with regard to which a few words from me might be of use. The administration of every civilized government has to be carried on through permanent officials whose duty it is to carry into practical effect the policy laid down by Government. These officials have detailed experience of administration, they are accustomed to weigh carefully the effects of their actions, and above all they have knowledge of the extent to which an ideal can be translated into practice. On the other hand you, the members of the Council, have first-hand knowledge of the feelings and social conditions of the people and you are animated by fresh ideas. If you trust your permanent officials and work in close co-operation with them, you will find them eager to place at your disposal their practical experience, and together you will be able to initiate and carry into effect measures which will be of incalculable benefit to the people.

May I conclude by reminding you of the noble words of His Royal Highness the Duke of Connaught in Madras, "Sink your differences and magnify the points on which you are in concord. Thus united, use your new political machinery to raise the depressed and to lower the walls between creeds and castes and hostile interests." And may Almighty God guide you in your labour!

I now declare the Council open.

APPENDIX VI.

Report on the All-India Handweaving Exhibition, Patna, 1921.

The Exhibition owed its inception to an offer of Mr. Sailendra Krishna Deb of Calcutta to Lord Sinha of two Government Promissory Notes of the face value of Rs. 1,000 which were eventually sold for a little over Rs. 1,100 as a prize for the best handloom to be given in an All-India competition. Sir Alfred Chatterton, who has great experience of the handloom industry, was consulted and eventually it was decided, with Mr. Deb's approval, to offer the prize for the best original device connected with handweaving. As Mr. Deb's offer involved a competition from inventors all over India, it seemed an excellent opportunity to hold an exhibition in order to demonstrate the importance of the handloom industry and to show what was being done to encourage and develop it in all parts of the country. The proposal was placed before the conference of Ministers and Directors of Industries at Simla in May last and the Government of Bihar and Orissa decided on their advice and the promise of support from all the other provinces and many Indian states to hold an exhibition towards the end of the year. It was hoped that such an exhibition would give a great impetus to the handloom industry by emphasizing its importance and by enabling the various Government departments and others engaged in encouraging and developing it to compare notes and learn from each other's successes and failures. The following quotation from the Exhibition Handbook shows in a few words the importance of the industry, the problems connected with it awaiting solution and the efforts which are being made to solve them.

"Few persons realise that one quarter of the cotton cloth consumed in India each year is made on the handloom and that there is reason to believe that this branch of the handloom industry so far from declining has actually expanded since the year 1900. It is estimated by the Indian Industrial Commission that the average amount of cotton yarn used annually by handloom weavers increased from 218 million lbs. in the five years ending 1900-01 to 287 million lbs. in the five years ending 1915-16, a rise of nearly 30 per cent. This would be equivalent to 1,291 million yards of cloth or more than one-quarter of the total amount consumed annually in India. In addition to cotton cloth, many beautiful and useful articles of silk and wool are produced. It is believed that the variety and excellence of the exhibits in this Exhibition will be a revelation to the public.

Yet the handloom industry in India works under grave disadvantages. Weavers as a class are ignorant and conservative to the last degree. For the

most part, they still use the same primitive appliances that their remote ancestors used in the times of the Moghul Emperors, the only really general advance which has taken place during the last century being the substitution of mill-spun yarns for the uneven hand-spun of former days. But the greatest handicap of the handloom weaver is his isolation and lack of business knowledge. The mills make their profits quite as much by the judicious purchase of raw materials and sale of their finished products as by the inherent advantages of steam or electrical power and complicated machinery. They buy the best yarns, if they do not make their own, whereas it is notorious that yarn sold to handloom weavers is deficient not only in length but strength. If the weaver working cheaply in his own home without the high overhead charges of the factory could yet enjoy the advantages of large scale purchase and sale, it seems likely that he would not only hold his own against the power loom but even carry the war into the enemy's country.

Government departments are, therefore, trying to help him in three ways. First of all they are introducing, with such modifications as may be necessary for Indian conditions, improved appliances like the fly shuttle, the dobbie and the jacquard which have been used in Europe for several generations. Secondly, they are endeavouring by means of co-operative stores and societies to bring to the weaver the advantages of large scale purchase and sale and of business organization in general. Thirdly, by means of technical institutes and industrial schools, they are affording the weaving and other classes the opportunity of specialised education and themselves undertaking research into the problems of the industry. In all directions great success has already been attained but only in quite recent years, and the great mass of the weaving community is as yet hardly touched. If the handloom weaver, with his primitive appliances and unorganised as he is, is able to produce in such quantity and quality the stuffs which are being shown at this Exhibition, there is good ground for belief that with the aid of improved appliances and co-operative societies, a great expansion of the industry will take place. "*

Organization.

It was decided that the Exhibition could be run more easily if its management was placed in the hands of a committee with complete freedom to undertake the necessary arrangements. General and executive committees were, therefore, formed as shown in Appendix I. The Hon'ble Khan Bahadur Fakhruddin, Minister of Education and Industries, became chairman of the general committee with Rai Bahadur Purnendu Narayan Sinha and myself as Joint Secretaries and Mr. Sanjiva Rao, Textile Expert, and Babu Arun Prokash Chaudhuri as Assistant Secretaries. A separate banking account was opened with the Imperial Bank into which grants made by Government were paid together with contributions from District Boards and the public. The general committee met once on 3rd August, 1921, when the main principles on which the Exhibition should be held were approved. The executive committee never

assembled, though some of the members gave valuable assistance towards preparing the Exhibition. In practice the whole responsibility for the organization and management of the Exhibition fell on my shoulders. The work was divided into two sections, everything connected with the receipt and arrangement of exhibits, the competitions, judging, etc., being in the hands of Mr. Rao, while the remainder including the preparation of the grounds, the arrangement for visitors from other provinces and the various districts of Bihar and Orissa, finance, printing, etc., etc., fell to Babu Arun Prokash Chaudhuri. In the regretable absence of Lord Sinha, the Exhibition was opened on November 28th by Sir Dawson Miller, Chief Justice, and remained open until the evening of December 4th or 7 days in all.

Exhibitors.

All the provinces in India eventually took part, *viz.*, Bengal, Madras, Bombay, the United Provinces, Punjab, Bihar and Orissa, Burma, the Central Provinces, Assam and the North-West Frontier Provinces, together with the following states—Hyderabad, Mysore, Baroda, Bikaner, Gwalior, Sikkim, Travancore, Kashmir, Jodhpur, Marwar, Bhopal, Rampur and Cochin. The Government of Nepal sent exhibits and so did the Imperial Agricultural Research Station of Pusa and the Feudatory States of Mayurbhanj, Nilgiri, Patna, Kalahandi, Baud and Nayagarh. Bengal, Madras, Bombay, the United Provinces, Bihar and Orissa, Burma, Assam, and Mysore made substantial exhibits of the various appliances which they are introducing among the weavers, and of typical cloths produced in the province and these arranged in pandals along each side of the ground formed one of the main attractions of the Exhibition. In addition each state and province collected exhibits of cloth from its handloom weavers in order to compete for the various prizes and medals. These exhibits were the special feature of the show, since no such complete and representative collection of Indian hand-woven materials has ever been made before nor could it have been made except by the industrial departments of the states and provinces, which alone are sufficiently in touch with the weavers all over India. In addition to these exhibits, a number of dealers from Bengal and Bihar as well as co-operative stores from Bengal, the Punjab, Burma and Bihar and Orissa took stalls. A few private engineering firms also exhibited improved looms, charkhas, etc.

Arrangement of grounds, exhibits, etc.

On entering the ground the visitor saw on either side a weaver's hut. In the one a weaver and his family were carrying on their trade with the usual country loom and appliances; in the other in the same space was an improved loom, a small warping machine, a pirn winding wheel and other improved appliances, all in use. The latter was a great attraction to the weaver visitors who appeared profoundly impressed by its possibilities. Beyond these, in straight lines on either side, were six large booths or pandals in which the

provinces and more important states were located. At the end of the ground was the large shamiana 96 feet square kindly lent by the Bettiah State. Here the *charkhas* were exhibited and the weaving competition held, while in the rear the cinema was housed. Along either side of the grounds, were 24 stalls or 48 in all. On the southern side the smaller states, co-operative societies and the general exhibits for prizes were stationed, while the northern stalls were allotted to dealers. At the western end of either side of the gate were located the office tents and refreshments for Europeans and Indians.

Number, quality and description of exhibits.

A descriptive account of the various exhibits of appliances will be found in Appendix II. The two largest exhibitions of weaving appliances were made by the Governments of Bengal and Madras. Both the Madras and Bengal pandals contained a number of ingenious machines, but the Bengal exhibit was of special interest, because the looms and appliances in it were not brought from any central institute but were collected from looms and appliances actually in use in the districts. The exhibits of the Government of Mysore also deserves special mention, if only because the sizing and beaming machines perfected by Mr. Rao, now Textile Expert in Bihar and Orissa, won Mr. S. K. Deb's special prize of Rs. 1,100 for the best original device connected with handweaving. The other exhibits in the central pandal deserving special mention were the collection of kinkobs and silks from Surat, the exhibits of Burmese silks from the Saunders' Institute at Amarapura near Mandalay, sample silks exhibited by the Pusa Research Institute and the so-called *himru* and *mushru* silk fabrics from Hyderabad. The last attracted special interest owing to the intricacy of their designs, the beauty of their colouring and their skilful execution.

The stalls.

The textile exhibits from the various provinces and Indian states were arranged in 24 stalls on the right while the private cloth merchants and dealers occupied 24 stalls on the opposite side. In the first five on the right, products of various co-operative societies had been displayed. The Punjab Co-operative Society had a fine collection of silks, Punjabi turbans and their famous "khes" or *chadars*, besides shirtings, coatings and towels. The Bankura Weavers' Society and another Co-operative Society of Bengal had each their special specimens of textiles. The Bhagalpur Weavers' Stores of Bihar did excellent business in their *tasar* suitings and spun silk shirtings. Burma was also represented in this group and their silk *lungis*, *pawas* and scarves in a variety of patterns and colours were much appreciated.

In the stalls reserved for the general exhibits the various fabrics were grouped under the prescribed classes (see Appendix III), each exhibit being labelled with a special coloured card with the name of the Province in bold type and that of the exhibitor, the price and description in writing. Thus Madras had a pink card, Bihar and Orissa green, Bengal orange, Assam buff, Indian

states white and so on. With the same class of goods in one place and with different provincial labels, it was possible for visitors to judge the quality and workmanship of the same type of cloth as manufactured in various parts of India. This arrangement considerably helped the judges in awarding the prizes.

General Exhibits of Cotton.

Among grey *dhotis* and *saris* coarse and medium qualities were mainly from Bihar, Bombay and Madras, while Bengal, Madras, Gwalior had a good collection of these goods in finer counts. While Madras and the Punjab *lungis* were mostly of finer counts of yarn, those of the United Provinces and Bihar were of coarse counts. Of handspun and handwoven goods, Dacca muslin from Bengal, "kokti" *dhotis* from Bihar and motia or garha cloth from Jaipur City, Bombay, Bihar, the Punjab and Marwar were the main exhibits. Some good samples of handspuns of finer qualities were exhibited both from Madras and the Punjab. Madras had a fine range of pattern in *angavastrams* or *chadars* with gold thread borders and the Punjab made a good exhibit of shirtings, "sunproofs" and coatings. Silk bordered *saris* from the Deccan were very poorly represented and with the exception of a few from Bombay and Madras, there were no others worth mentioning. In solid border *dhotis* Madras was the only province to exhibit, but the solid border *saris* of Cuttack and Sambalpur in Orissa were of more artistic workmanship than those from Madras. Practically all provinces made exhibits in towels and *gamchas*. Turkish towels from the Punjab, Burma and Madras and napkins from Tanjore, Calicut and Ludhiana factories deserve special mention. Coloured bed-sheets were poorly represented, but the bed-sheets and table covers of the Commonwealth Trust of Calicut deserve special mention for their originality in design. Marwar and Bhopal had also a number of exhibits in this class. In turbans, Madras, the Punjab and Bengal had a wide range of samples, but the other provinces were not well represented. Bengal had no equal in fine muslins, although Gwalior, Madras and Assam made exhibits. Coarse cotton goods such as *dosutis*, *khadi*, plain towels and *chadars* were exhibited by almost every province and state and this fact shows to what extent the grey goods woven by the mills, are also manufactured by the hand weaver. Fabrics such as shirtings, coatings, table covers and napkins were mostly from the weaving factories or industrial schools and very few of the cottage weavers made exhibits in this class.

Mulberry silks.

Next in order were the silk and gold thread cloth stalls, where the famous kinkobs of Benares, Surat and Hyderabad were ranged. The samples were all of very good workmanship reflecting credit on the ingenuity and skill of the Indian weaver. A gold thread silk *sari* of Benares pattern woven on a 600s jacquard machine from Mysore deserves special mention, as do the beautiful exhibits from Gwalior, which attracted much attention but there were fine

specimens of high-class silk *saris* also from Baroda, Poona, Hyderabad, Mysore, Madura and Bishnupur. Gold thread bordered fine cotton *saris* from Bengal were also very attractive and in the matter of design and texture they suited the taste of the present generation. Gold thread handbags from the United Provinces were much in demand and the few available were all sold in the first two days of the Exhibition. In plain silks, Burma, Madras, Assam, Bombay and Kashmir had a few exhibits. Fine silk *dhotis*, *saris* and turbans from Murshidabad and silk dress pieces made at the Pusa Research Institute completed the list of exhibits. The latter as usual were much admired, but were not for sale.

Wild silks.

The stalls reserved for wild silk fabrics were practically monopolised by Assam and Bihar and Orissa, although Bengal and the Central Provinces had a few exhibits in *tasars*. The *muga chadars* and *saris* with their elaborate border and cross border ornament with all the appearance of gold embroidery, yet soft and washable, were much admired. The *tasar* coatings, *dhotis* and *chadars* from Bankura in Bengal and Raghunathpur and Mayurbhanj in Bihar and Orissa were of very good texture and Sambalpur *saris*, Chaibasa *dhotis*, and Bhagalpur *thans*, though not so fine in texture, were good specimens in their own classes. Dyed *lungis* and saris of *tasar* were only exhibited from Bhagalpur.

Spun silk mixtures, etc.

In mill-spun silk fabrics, Bhagalpur in Bihar and the Punjab were the only competitors for the prizes. The shirtings from these places were fine and tastefully designed. Of the mixtures, *himrus* and *mushrus* from Hyderabad deserve special mention and were very much appreciated by the Muhammadan public. Their intricate flowered designs were harmoniously conceived and skilfully executed. Bhagalpur "bafta" and Baroda *saris* were the only other exhibits in this class of goods.

Woollens.

Kamals or country blankets were very poorly represented. Under milled blankets and rugs Sikkim, Tibet, the North-West Frontier Provinces, Nepal, Bihar and United Provinces in particular contributed some choice specimens, some of which were very smooth and equal in quality to English ones. The "lohis" from Bikaner, Marwar and the Punjab were equally good. For artistic merit, execution and fineness, the Kashmir shawls ranging in prices from Rs. 150 to Rs. 2,000 rivalled anything in the show and were much admired though beyond the means of any except the wealthy. Durries and *asans* were exhibited in very large numbers. Those from Bombay deserve special mention for their elaborate designs while the Punjab durries were notable for their thick textures. Bhopal, Baroda, Madras and Assam also exhibited in this class, while the North-Western Frontier Provinces sent a few woollen durries.

Indian State stalls.

Besides their best samples of fabrics in the general stalls, Kashmir, Bikaner, Nepal and Marwar had their own stalls where their other exhibits were displayed. The Sericultural Department of Kashmir made an interesting exhibit of silk yarn reeled in their factory at Srinagar, besides a few samples of cloth made out of it, which were much admired, as were the same States' *pattoo* and high-class woollen suitings in the neighbouring stall.

Dealers' stalls.

Half of the dealers' stalls were occupied by Bengali cloth merchants chiefly from Murshidabad. The silks from the latter place, and muslins and fine cotton *saris* from Dacca, Tangail and Santipur were sold in fair quantities. *Tasars* from Bhagalpur and Raghunathpur and muslin and *lungis* from Bihar sharif also found a market.

Weaving competition.

The weaving competition aroused great interest, especially among the numerous weavers present from all over India and Burma. Arrangements had been made to allow two persons from each province and state to compete, but only 10 weavers—2 from Bengal, 2 from Bombay, 2 from Bihar, 2 from the United Provinces, 1 from Hyderabad and 1 from Assam, took part. The competition was started on the 1st December 1921 at 8.45 a.m. and closed at 4 p.m. with an interval of 1hr. 45 mts. for rest. The competitors, therefore, were acutally at work for 5¼ hours in all. The looms were especially constructed for the purpose and were exactly uniform. Identical warps were supplied ready for drawing in through healds and reeds. Each weaver was allowed to draw in his own warp and arrange it on his loom to his own satisfaction. He was also allowed, if he wished, to use his own sley and to practice on the loom for a day previously. The warp supplied was of ordinary 20s counts of (single) yarn. All competitors were, therefore, placed, as far as possible, on an exactly equal footing and the result should have been determined by skill and endurance alone. The winner of the competition was Khuda Bukhsh of Bombay. He actually wove 17 yds. 22 in. in the 5¼ hours, putting a total of 22,824 picks in the cloth with an average of 36 picks of weft per inch. Mohammad Sulaiman of the United Provinces was second with only 13 yds. 29 in. but he put 20,874 picks in the cloth, or an average of 42 picks per inch. Narsiruddin of Bihar wove only 12 yds. 8 in. with an average of 38 picks per in. but his speed when actually at work was marvellous. His rate of picking was several times tested and he was found to put in 144 picks per minute whereas the next best, Khuda Bukhsh, the winner of the competition, put in only 128. The effective picks put in by the latter were as many as 70 per minute or 55 per cent. of his rate of picking. Nasiruddin failed to do better in the competition because his warp was not well beamed and caused him continual trouble. The results of the competition were surprising. In no competition previously held, so far as is known, has anything like the present speed been attained. The working of a fly shuttle appears to need little physical effort, good picking being a kind of knack. As

small boys can acquire this and keep it for a long stretch just as well as grown men, there seems no reason why women should not use the fly shuttle very nearly as well as men. Khuda Bukhsh was awarded a gold medal, Mohammad Solaiman a silver medal and Nasiruddin was given a special prize.

Charkhas.

A large number of visitors were always attracted by the *charkhas*, but the exhibits were, on the whole, disappointing. The " Sarala charkha, " which was awarded the gold medal presented by the Maharajadhiraj of Darbhanga was constructed after the model of the Saxony wheel with a vertical spindle and was worked by the feet.... The second best *charkha* was exhibited by the brother-in-law of the Maharajadhiraj himself. This had a horizontal spindle and was turned by hand. The thread produced on all the *charkhas* was uneven and weak compared to the yarn produced by the power mills.

Handbook.

A special handbook was prepared to which each province and state contributed an account of its hand-weaving industry and the measures which its Government was taking to encourage it. Some of the accounts were very full and interesting and the handbook as a whole is a valuable record of the state of the industry in India. A number of spare copies have been distributed to the different provinces and states and others are available and may be purchased for eight annas each, if desired.

Prizes.

A silver medal and a bronze medal was offered in each of the 134 classes in which the exhibits were arranged. Gold medals were offered for articles of special merit and many of these were presented by private donors. Every winner of a medal also received a parchment certificate printed in gold, while a number of such certificates were given to exhibitors who did not win medals. In addition to the special prize offered by Mr. Deb, several money prizes of Rs. 100 were awarded by the various local governments. A list of all the prizes together with the names of the winners is given in Appendix III, while Appendix VI contains an abstract of the prizes won by each province and state. The medals were struck from two especially prepared dies at the Calcutta Mint by the special favour of the Mint Master to whom the thanks of the Committee are due for the great trouble he took in the matter. The front of the medal was taken from an engraving of an Indian weaver in the Encyclopædia Brittannica, while on the obverse was a laurel wreath with a plain centre leaving room for an inscription. The gold medals presented by private donors were suitably inscribed but the other medals were presented blank, it being impossible to arrange for them all to be engraved. If desired, they can be inscribed by the recipients themselves or the Departments of Industries of the provinces concerned.

Judging.

The judging was carried out by small committees of the Directors of Industries and Textile Experts belonging to the various provinces. For the general exhibits of textiles, two experts were appointed for each main class, *e.g.*,

"Class A—cotton fabrics," with a referee in case of difference of opinion. Special panels consisting of Directors of Industries and Experts were appointed to decide each of the money prizes and the special gold medals. On the whole, the judging was, I think, very satisfactory. The results, of course, did not satisfy everybody and some criticism was heard. So far as it had any foundation, it was due to the failure of the judges in a few cases to make certain that all the exhibits in the various classes were before them at the time they made their decision. If any such exhibition is held again, I would suggest that the judges should be carefully instructed to compare the actual exhibits with the list before arriving at a decision. It would also, I think, be better if possible to join with the weaving experts a dealer in the class of cloth being judged.

The Cinema.

In order to attract visitors, arrangements were made with Messrs. J. F. Madan and Co. of Calcutta for a special bioscope exhibition. Films were shown which had not been previously exhibited in Patna and among these were two entitled "The Birth of Shri Krishna" and "Sakuntala" which proved a great attraction. The cost of the bioscope, however, was by no means covered by the tickets sold and in spite of the consideration shown by Messrs. J. F. Madan, this part of the show resulted in a dead loss. The rates charged for seats were Rs. 3, 2, 1, and 8 annas. But from the 30th of November onwards all those purchasing an 8 anna ticket were admitted to the show and to the pit of the cinema by the one ticket.

Attendance and sales.

The number of persons who attended the Exhibition was fewer than I had anticipated and the entrance money received, inclusive of the cinema receipts, was only just equal to the takings at the Provincial Exhibition of 1919, although the latter was open for three days as against seven days on the present occasion. The entrance fees charged are shown below.

Date.	Day.	Entrance fee.	Number paying for admission.
		Rs. a. p.	
28th November	Monday	1 0 0	573
29th "	Tuesday	1 0 0	377
30th "	Wednesday	0 8 0	627
1st December	Thursday	0 8 0	932
2nd "	Friday	0 4 0	1,445
3rd "	Saturday	0 4 0	2,357
4th "	Sunday	0 8 0	1,573
	Total number of visitors ...		7,884

In addition to this, 49 persons purchased weekly tickets for Rs. 8, and there were 462 exhibitors and 100 pass-holders as well as 70 volunteers and the staff who, to an average of 600 daily, visited the exhibition free of charge. These results were disappointing in a town of one hundred thousand inhabitants, especially since the popular interest in weaving and hand-spinning is so great at the present time, and the Exhibition was well advertised by attractive posters and sandwichmen all over Bihar. The poor attendance is said to have been due to the efforts of non-co-operators to prevent persons from visiting the Exhibition. How far this is true, I cannot say. Certainly no active picketing took place and one or two leading non-co-operators visited the show and purchased cloth, for which they were afterwards pilloried in the extremist press. Seeing that hand-spinning and weaving is one of the chief planks in the non-co-operation platform, this attitude is a good example of unreasoning opposition to anything in the least degree connected with Government. It is difficult to understand why a non-co-operator who uses trains, eats salt and pays taxes to Government should have decided to boycott an exhibition designed to carry out the object which he professes to have nearest to his heart, merely because it was organised by Government, especially when "Government" is a Minister responsible to the Legislative Council.

Erection and maintenance of the exhibition.

The erection of the pandals and stalls, etc., etc., was placed entirely in the hands of one contractor, Messrs. Kuver, Lt. of Calcutta. A lump sum was fixed, based on certain scheduled rates, while other rates were fixed for extra work which might have to be carried out. In spite of careful planning, however, it became necessary to entrust to the contractors a good deal of work for which their contract did not provide. Still the work was well done and the rates paid were not excessive, while it was generally agreed that the grounds were prettily laid out. The Exhibition was open each day from 2 p.m. to 8 p.m., while on Sunday, December 4th, it was open also for three hours in the morning. As it became dark, each evening at about 5 o'clock, the grounds were lighted by 20 powerful Kitson lights each of one thousand candle power, while four more such lights were erected outside the Exhibition on the four sides to facilitate the work of the police. In addition to this, each pandal and stall, as well as the tents, were lighted with electric light supplied from the Government power house. A fire hydrant and two taps for drinking water were erected by the Public Health Department at the expense of the Exhibition. Refreshments were provided both for Europeans and Indians by contractors. The grounds were decorated with over 1,200 pots of ferns, shrubs and chrysanthemums about half of which were bought or borrowed from the Government nursery, while the remainder were generously lent by the Hon'ble Maharaja Bahadur Keshab Prasad Singh, C.B.E., of Dumraon. The pandals and stalls were draped with red and white cloth which was subsequently sold to the Prince of Wales Reception Committee, while the same Committee kindly lent numerous flags and shields which greatly improved the appearance of the grounds.

Admirable arrangements were made by the Superintendent of Police for the safety of the Exhibition both from fire and from theft. Besides the fire hydrant for which the Municipality kindly lent 500 feet of hose, earthen pots of water and sand were placed in every stall and a number of buckets of sand were kept ready to be used in an emergency. A special fire squad was located in the centre of the Exhibition and a watchman was always on duty on an elevated platform. Although a number of very valuable pieces of cloth worth many thousands of rupees were exhibited, the total losses hardly exceeded the sum of Rs. 100 and these may be ascribed either to mistakes in the lists or to casual pilfering from the stalls. Each night all the textile exhibits were removed from the stalls and placed in almirahs or boxes under lock and key. They were then put in charge of the police guard and no one was allowed inside the Exhibition grounds until the next morning except one night watchman employed by the Exhibition authorities. Many protests were received against this arrangement, especially from those who were exhibiting valuable cloth but, as I expected, it proved to be the safest and best. If other persons besides the police had been allowed to remain in the grounds, it would have been impossible to fix responsibility for thefts. The police deserve great credit for their work and with the permission of the Superintendent of Police, I was very glad to place a sum at his disposal for distribution as a reward.

Arrangements for visitors from other provinces.

As a large number of persons were present from other provinces, as far distant as Burma, the North-Western Frontier Provinces, Kashmir and Mysore and accommodation was difficult to secure in Patna, special arrangements had to be made for housing them both before and after, as well as during the Exhibition. Fortunately the building known as Shah Mazhar Hosain's house, which has been acquired for the Bayley Library and not yet taken over by the trustees, was available for the purpose. About 40 or 50 weaving assistants, demonstrators and other persons of the respectable class were accommodated in the house itself, while 200 or more weavers and others were encamped in the compound in small tents which were kindly lent by the Police and Jail Departments. The compound was lighted with Kitson lights and provied with two drinking taps, while Hindu and Muhammadan hotels were run by contractors during the whole period.

Conferences.

Two conferences were held, the results of which it is proposed to publish separately. The conference of Textile Experts from all over India, which may have been said to be one of the main objects of the Exhibition, was a great success. The various subjects proposed by the different provinces were eagerly discussed to the great advantage of those present and the conclusions reached were in many cases of great interest. Advantage was taken of the presence of experts from Kashmir, Mysore, Bengal, Pusa and other provinces of India to hold a conference of sericulturists, the proceedings of which proved very useful to persons connected with it.

Finance.

The Exhibition was financed by means of a grant from Government, contributions from District Boards and the public and its own receipts, all of which were placed to the credit of the Secretary in the Imperial Bank of Patna. This arrangement gave that complete freedom of action which was essential. A provisional statement of receipts and expenditure is included in Appendix IV, but some further adjustments may be necessary. The total cost of the Exhibition, exclusive of expenditure on special prizes given by various persons and Governments, was Rs. 23,754-8-0; of this Rs. 6,200 was covered by contributions from District Boards as shown in Appendix V, Rs. 4,554-8-0 was met from receipts and the balance of Rs. 13,000 fell on Government. The contribution of Rs. 2,000 by the Patna District Board deserves special mention. In view of the scope and size of the Exhibition, the expenditure is wonderfully small. In fact, I was authorised to spend up to Rs. 20,000 of Government money. The accounts are ready for audit, if desired, but I am inclined to think this unnecessary, since I passed every item of expenditure myself.

Results.

On the whole, especially when it is considered that this was the first of its kind, the Exhibition may be claimed to have been a striking success. The exhibits of cotton, silk and woollen cloth were fully representative of all parts of India and Burma and were, as a rule, of excellent quality. Sales were, for a centre like Patna, extremely good and the Exhibition will certainly lead to an extension of trade. "It undoubtedly impressed the public with the extent and variety of the handloom industry in India and its possibilities of development. The various experts attached to Government departments derived great benefit from seeing each other's appliances and products and exchanging ideas. The conferences too were very useful. All agreed that they had learnt a great deal from the Exhibition and in this way it must hasten the progress of the industry. One of the most interesting features of the discussions which took place was the absolute unanimity of opinion among the experts that handloom weaving so far from being decadent was capable of great extension and development not only as an artistic industry, where its vitality is obvious, but on the side of mass production. It is to its output of coarse cloth that it owes its real importance as the second largest industry (after agriculture) in India, employing some 2,000,000 adult and male weavers and probably about 5,000,000 men, women and children in all and if this side of it were destined to succumb to mill competition, it would sink to the position of a small luxury trade. The meeting of all the experts in India and their unanimous assertion of the ability of the industry to thrive and expand is an event of importance in its history and one which will give renewed confidence to all those engaged in assisting it. Another important point elicited was the ability of small handloom factories, if properly organised and managed by persons with a knowledge of weaving and the trade, to hold their own, even in those classes of cloth which are usually considered the stronghold of the mill industry. This does not mean that many of the factories now being

started are likely to survive, since they are usually not well run, but it does hold out hope that a small industry suitable for the educated classes can gradually be built up. On the other hand, opinion was unanimous against cotton spinning at least as a wholetime occupation for men."

As already mentioned the most disappointing feature was the comparatively small attendance. Large crowds were not to be expected at Patna but a total of under 8,000 paying visitors was less than might have been expected. On the other hand, over 462 competitors most of whom were actual weavers came from all over India, though chiefly from Bengal and Bihar and Orissa. These men should do much to spread abroad the possibilities of new appliances with which they were obviously much impressed. Indeed, the results of the weaving competition were so striking as to convince the most sceptical. I repeat, therefore, that the Exhibition was a striking success and it has certainly paved the way for another similar exhibition, which it was the unanimous opinion of all Directors and Experts, should be held in some large centre two years from now. On the next occasion every province will realise what is expected of it and the exhibits both of cloth and appliances should be even better than at Patna.

Assistance received, work of staff.

As I have several times stated, the success of the Exhibition was mainly due to the whole-hearted support given by most of the provinces and states. Without their exhibits, their organization and their assistance, it would have been impossible to hold it at all and it may be properly described as the result of their joint efforts. The thanks of the committee are also especially due to Mr. Millwood, the Government Architect, who kindly helped in the design and decoration of the entrance and pandals for which he lent flags and shields, and to those gentlemen who lent tents, *kanats* and other articles. Among them may be mentioned, the Private Secretary to His Excellency, the Maharaja Bahadur of Dumraon, the Bettiah Estate, the Badshah Nawab's Estate, M. Buttu Khan and the Chairman of the Patna City Municipality. The chief credit for the organisation and management of the Exhibition must be awarded to Mr. Sanjiva Rao, Textile Expert, Babu Arun Prokash Chaudhuri, Agricultural Inspector, whose services were lent for the occasion. Both had previous experience of Exhibitions, which was invaluable and each in their own spheres carried out their duties in a manner deserving of the highest praise. Babu M. K. Sen Gupta, teacher from the Bihar School of Engineering, and the students and others who acted as volunteers, also did extremely useful work, for which I wrote them each a special letter of appreciation.

B. A. COLLINS,
Director of Industries, Bihar and Orissa.

RANCHI:
The 25th January 1922.

APPENDIX I.

GENERAL COMMITTEE.

THE HONOURABLE KHAN BAHADUR SAIYID MUHAMMAD FAKHR-UD-DIN—Minister for Education—President.

1. The Honourable Mr. M. S. Das, C.I.E., Minister for Local Self-Government, Patna.
2. The Honourable Maharajadhiraja Sir Rameshwar Singh, G.C.I.E., K.B.E., K.C.S.I., Darbhanga.
3. Maharaja Bahadur Guru Mahadevasram Prashad Sahi, Hatwa, Saran.
4. Raja Kirtyanand Singh, M.L.C., Banaili, Purnea.
5. Raja Harihar Prasad Narayan Singh, M.L.C., Amawan House, Patna.
6. The Commissioner of Patna Division.
7. The Collector of Patna.
8. Rai Bahadur Nishi Kanta Sen, M.L.A., Purnea.
9. Rai Bahadur Radha Krishna Jalan, Patna City.
10. Khan Bahadur Saiyid Mohammad Ismail, Patna City.
11. Rai Bahadur Prithichand Lal Chaudhuri, Purnea.
12. Rai Bahadur Radha Govinda Chaudhuri, Ranchi.
13. Rai Bahadur Chandra Dhari Singh, Patna.
14. S. Sultan Ahmed, Esq., Bar-at-law, Patna.
15. Rai Sahib Susil Kumar Roy, Madhubani.
16. Rai Sahib Ram Gopal Singh Chaudhuri, M.L.C., Patna.
17. Mahanth Gadadhar Ramanuj Das, M.L.C., Puri.
18. Babu Sham Narayan Singh, M.L.C., Patna.
19. Babu Ganesh Dutt Singh, M.L.C., Patna.
20. Maulavi Md. Husain, M.L.C., Patna.
21. Maulavi Hafiz Zaffar, Pleader, Bihar Shariff, District Patna.
22. Mr. Saiyid Md. Mohsin, Bihar Shariff, District Patna.
23. Babu Bansidhar Dhundhunia, Bhagalpur.
24. Babu Tara Prosanna Ghosh, Ranchi.

Joint Secretaries.

Rai Bahadur Purnendu Narayan Sinha.
Mr. B. A. Collins, Director of Industries.

Assistant Secretaries:

Mr. Sanjiva Rao, Textile Expert to the Government of Bihar and Orissa.
Babu Arun Prokash Chaudhuri.

EXECUTIVE COMMITTEE.

The Commissioner of Patna Division, Chairman.
The Joint Secretaries.
The District Magistrate, Patna.
Rai Bahadur Radha Krishna Jalan.
The Chairman of the Patna Municipality.
The Sanitary Engineer.
Babu Arun Prokash Chaudhuri, Assistant Secretary.

APPENDIX II.

Descriptive Account of the Provincial Pandals.

Number, quality and description of the exhibits.

Although a detailed account of the various exhibits is not possible, an attempt will be made to give an idea of the main features of the machinery exhibits useful for handweaving and the different classes of hand-woven fabrics displayed in the booths, both by private dealers, and the various Departments of Industries and co-operative societies. The weaving appliances were all housed in the twelve pandals in the centre of the grounds and in a spacious *Shamiana* at one end of it. In the order of location, the Madras pandal on the left first attracted the attention of the visitor with the United Provinces, Assam, the Punjab, Mysore and the Central Provinces beyond it. On the left, the Bengal pandal with a number of improved looms, especially built up for the weaving of its various indigenous patterns, headed the row followed by Bombay, Bihar and Orissa, Burma, Pusa and Hyderabad. The largest and best collection of exhibits were those put in by the Governments of Bengal and Madras, while that of Mysore, which actually won the big prize, deserves special mention.

Madras.

The Madras exhibits included a bobbin and pirn winder, each with one spindle and a small warping drum for the preparation of short warps with leases for sizing, a bigger mill about 9 to 10 feet in height (commonly known as the Sholapur mill) for warping 12 warps of about 10 yards in length and a vertical warping mill (European type) all intended for the cottage weaver. A yarn steaming apparatus, a hank-sizing machine, sectional warping machine, sectional sizing machine with hot air chamber to size 200 ends, bobbin and pirn winding machines of 6 spindles each and a beaming machine with drums to hold different coloured warps at tension while winding on were preparatory appliances and more suitable for small factories. The method of harness building for a jacquard machine was also demonstrated. There were two types of double box sleys and a sley with four drop boxes, while a durrie loom with a fly shuttle sley of four boxes, with an attachment for securing a longer length of weft than the width of the carpet, was a very ingenious contrivance and likely to be very useful for durrie weavers. A model pit loom with take-up motion and a frame loom with a trough for humidifying and an adjustable tappet for weaving various simple patterns on borders, a sley for solid bordered

cloths, a twisting machine and a terry loom completed the list of appliances exhibited.

United Provinces.

The main features of the United Provinces exhibits were the attachment of a take-up motion to a pit loom, a weighting arrangement for the warp roller, a vertical warping mill with automatic leasing and a circular box for six shuttles. The weaving of untwisted silk warp was demonstrated on two pit looms in one of which the warp was of degummed silk and in the other of dyed raw silk of very fine deniers. A frame loom with a lattice dobby, a loom for weaving Turkish towels, and a winding *charkha* with four swifts and bobbins complete were also among the exhibits.

Assam.

Assam, the home of wild silk, such as *eri* and *muga*, demonstrated the reeling of cocoons on two foot-driven reeling machines. The saving of the operation of re-reeling was effected in these by the use of a bigger and standard size of reel. A lattice dobby worked on a frame loom to weave designs on borders of cloth was of a simple type. The weaving of *chadars* and *saris* with elaborate designs on borders was shown on a jacquard loom in contrast to the method of weaving those on the old type of Assamese loom. Assam had also a solid bordered sley with samples of cloth woven. In another portion of this pandal were the sericultural exhibits of the Assam Government and typical Assamese silks collected by the Government Emporium at Gauhati. In the Punjab pandal, as no exhibits of weaving appliances was made, Messrs. Berry and Co. of Calcutta, displayed their automatic loom, warping mill and bobbin and pirn winding machines of the Hattersley type.

Mysore.

Mysore had machines in each of the groups of appliances required for the cottage weaver, the factory and for silk throwing. Their sizing and beaming machine perfected by Mr. Rao, now Textile Expert in Bihar and Orissa, which won Mr. Deb's prize, was of special interest. It consisted of (1) a warping frame to warp on flanged beams in sections yarn from a creel holding 100 bobbins, (2) a sizing and drying box and (3) a drum to wind sized sections of warp of uniform length. The latter had a beaming stand to get the sized warps wound on to the weaver's beam. The warping frame was reported to produce one warp of 100 ends in 2,000 yards in length in a day of eight hours, while the sizing machine fitted up with a hot air chamber, sized one section of 400 ends and 130 yards in length in 45 minutes. When compared with the usefulness and productive capacity of these hand appliances, their cost did not seem to be much as the whole set was said to be available for Rs. 650. A bobbin winding wheel with traverse motion, an automatic pirn winder, both

with adjustable swifts had distinct advantages over crude primitive *charkha*. Bobbin winding and universal pirn winding machines, each with 12 spindles, were said to have been designed, both for cotton and silk. The automatic adjustment of the brake on the swifts in these machines was especially recommended for the unwinding of dyed and soft silks, including untwisted qualities. The warp beaming and sizing machines to size 400 ends at a time were reported to give a production of 4,200 ends of 130 yards per day of 8 hours. For raw silk winding, twisting and doubling, there were separate appliances. Besides the above, Mysore also exhibited a solid border and double shuttle sleys and a ball thread winding machine.

Central Provinces.

The Central Provinces exhibited one double shuttle sley of a simple type which won the prize awarded by United Provinces for the best multiple shuttle box sley. In the same pandal, the Bengal department displayed some interesting sericultural exhibits and Mr. Jamedar of Calcutta, representative of the National Aniline and Chemical Co., gave demonstrations of the dyeing of aniline colours.

Bengal.

In the Bengal Pandal, the exhibits were of especial interest, because they were mostly not brought from the Serampur Institute, but collected from looms and appliances actually in use in the various districts of Bengal. All types of improved looms for weaving cloths varying from Dacca and Tangail fine cotton cloths and Bishnupur silk *saris* to coarse Santali cloths were represented. A loom fitted with half healds, jacquard machines for weaving designs on borders of cotton and silk *saris*, double and multiple shuttle box looms for weaving *lungis*, etc., aroused special interest. Another simple but ingenious loom was one with a fly shuttle designed for a Santali house, where space is valuable. It could be removed and put away every evening. There were also looms for cloths requiring more than four treadles, towel, bed-sheet and Turkish towelling looms, a small tape loom and a spinning *charkhas* from Kalimpong. All were being worked. A hank-sizing and drying machine, a carpet loom, and an improved Serampur frame loom were also exhibited. An educated Bengali exhibited a primitive loom on which he wove a silk cloth with the likeness of an Indian political leader, and a *dhoti* with a few sentences of welcome to Lord Sinha, woven on the borders right along its length. A very fine handspun and hand-woven muslin cloth was also shown.

Bombay.

Bombay had a very fine collection of kincobs and silks from Surat, Mahratta *saris* and other fabrics exhibited with weaving appliances in their

pandal. Among the latter, a fly shuttle sley with double shuttle boxes which were controlled by the tappet weaving the designs on borders of *saris* was of interest. The arrangement of the border healds was such as to keep away the coloured weft forming the squares on the body of the *sari* from the red borders of silk. Mr. Tikekar of Sholapur exhibited his winding and twisting machines, a "Kalyan" automatic loom and a pit loom for weaving Deccan *saris* with the help of a fly shuttle sley.

Bihar and Orissa.

Bihar and Orissa had a collection of fabrics from different parts of the province. Among these special mention may be made of the following articles of interest: hand spun and hand woven "Kokti" cloth from Darbhanga, cotton muslins from Biharsharif, *tasar dhotis* and *chadars* from Raghunathpur and Mayurbhanj, silk shirtings, *tasar* coatings and *bafta* cloth from Bhagalpur, cotton *saris* of artistic designs with printed yarn from Orissa, solid border *tasar saris* from Barapali, fine *dhotis* from Kendrapara, Telugu *saris* from Cuttack, carpets from Obra (Gaya), durries from Patna City and Gaya, "Kol" *saris* and motia cloth from Ranchi, and woollen blankets from Gaya, Sasaram and Ranchi. Hazaribagh Reformatory School also made a good exhibit in this pandal. Improved methods of warping and sizing for the cottage weaver were shown here with the help of a warping drum, winding reels and bobbin-winding wheels. Two fly shuttle looms with a simple type of fly shuttle sley recommended to the Bihar weavers and a warping machine suitable for a factory were also exhibited. To give an idea to the public of the methods employed in the production of *tasar* cloths the present methods of reeling and weaving were demonstrated.

Burma.

Burma had a fine collection of silks from the Saunders Institute at Amarapura, two frame looms fitted with the Salvation Army picking attachment and take-up motion and a vertical warping mill of the European type. The Salvation Army looms, which are not recommended by other Government Departments are claimed to have a special advantage in the weaving of Burmese silks which require close weaving. Burmese bobbins of lacquered bamboo sticks and an old fashioned carved Burmese loom exhibited as a contrast to the improved looms attracted special attention.

Pusa.

The sericultural section of the Pusa Research Institute had its exhibits in the adjoining pandal. Along with trays of live worms, moths and cocoons in the spinning stage, there could be seen soft silks of beautiful shades and patterns woven at the Institute. A demonstration of the reeling of silk-thread from cocoons on an improved type of reeling machine worked by the feet

was also given.

Hyderabad.

There was a fine display of *himru*, *mushru* and silk fabrics from Hyderabad (Deccan) in the last pandal. Some of these were of ancient manufacture but others hardly less beautiful had been made in modern times. The designs were so elaborately worked with four to six different colours of weft that it was difficult for a casual visitor to believe that the simple "Himru" loom that was worked at one corner of the shed was capable of reproducing such artistic and complicated patterns.

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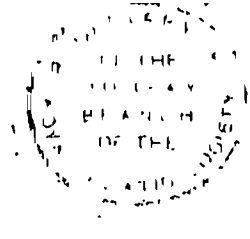
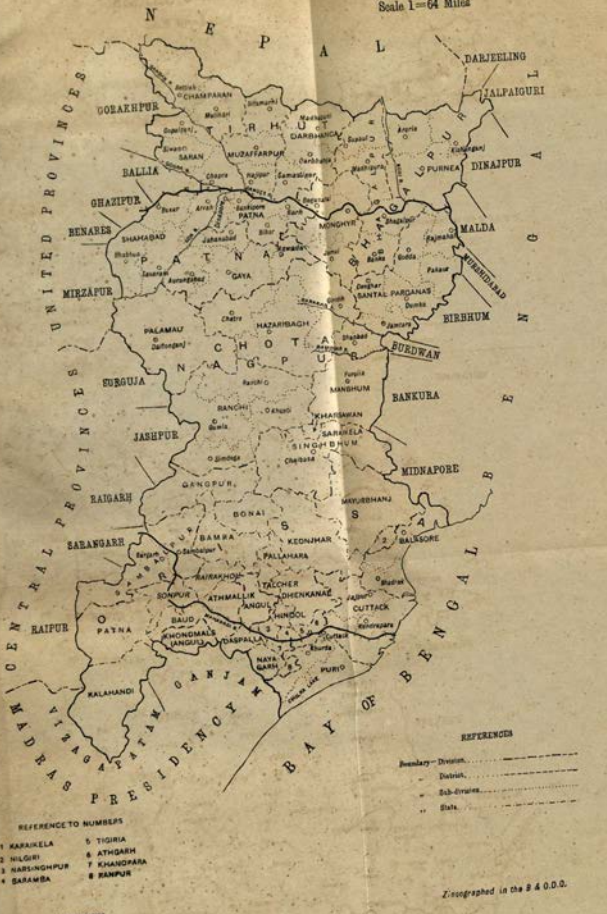


PATNA
SUPERINTENDENT, GOVERNMENT PRINTING, BIHAR AND ORISSA
GULZARBAGH

PROVINCE OF BIHAR & ORISSA

Scale 1"=64 Miles



REFERENCES

Boundary—Division.....
" District.....
" Sub-Division.....
" State.....

REFERENCE TO NUMBERS

1 SARAIKELA
2 NILGIRI
3 NARSINGHPUR
4 BARAMBA
5 TIGIRIA
6 ATHGARH
7 KHANDPARA
8 RANPUR

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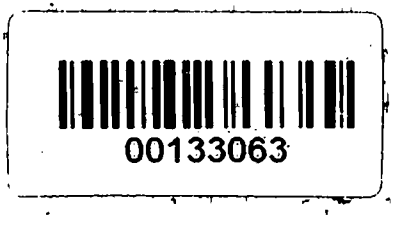
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